

**Return to Work of Stroke Survivors after Taking Rehabilitation Service
from Centre for the Rehabilitation of the Paralysed (CRP)**



By

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STATEMENT OF AUTHORSHIP

Except where is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis presented by me for any other degree or seminar.

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This thesis has not been submitted for the award of any other degree in any other tertiary institution.

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

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DEDICATION

I dedicate this project to my creator, Almighty Allah who makes me enable to complete this study and also dedicate to my honorable and beloved parents, my respected all teachers of Bangladesh Health Professions Institute.

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LIST OF ABBREVIATIONS

BHPI= Bangladesh Health Professions Institute

BD= Bangladesh

CBR= Community Based Rehabilitation

CRP= Center for the Rehabilitation of the Paralysed

COAT= Canadian Occupational Therapy Association

IRB= Institutional Review Board

ICF= International Classification and Functioning Disability and Health

mRS= Modified Ranking Scale

OT= Occupational Therapy

PT= Physio Therapy

RTW= Return to Work

SPSS= Statistical Package for Social Science

SRU= Stroke Rehabilitation Unit

VR= Vocational Rehabilitation

WHO= World Health Organization

ABSTRACT

Background: Stroke continues to be an alarming medical and public health problem for both developed and developing countries. Stroke impacts on survivor's ability during return to work and also limited one's participation in his productive life.

Objectives: To explore the rate of returned to work of stroke survivors and what variables influence this of stroke survivors.

Methods: This is a quantitative cross-sectional descriptive analysis research design conducted through 48 stroke survivors selected from Dhaka district between August 2018 to March 2019. Participants were selected by the purposive sampling process. Data was collected through face to face semi-structure questions by using a developed questionnaire (Factors That Influence Return to Work After Stroke)

Result: Only 42% of participants (mean age \pm SD 45.92 \pm 9.832 years) returned to work following their stroke and who have returned to work had low Modified Ranking Scale (mRS). The main barriers of returned to work are: poor functional use of affected arm and leg, difficulty with speech, low energy, poor memory, difficulty with vision, dizziness, pain, demotivated, attitude of superiors, attitude from subordinates, accessibility, poor concentration, difficulty with hearing, difficulty with thinking skills, self-sufficient and tires easily. The facilitators are: family take care, get well, boredom, enjoyment of work, financial, job-saving, personal development, pressure from family and motivation.

Conclusion: The rate of return to work of stroke survivors is low. On the basis of this study, it is necessary to improve communication between therapist, stroke survivors about rehabilitation service and clients return to work.

Keyword: *Stroke, work, return to work, rehabilitation service.*

1.1 Background

Stroke continues to be an alarming medical and public health problem for both developed and developing countries (Patterson, 2018 & Duff et al., 2014). It is one of the most common causes of adult disability worldwide (Chang, 2015). Every year 15 million people suffer from stroke worldwide. Among them, 5 million die and another 5 million are permanently disabled (World Health Organization, 2014). Stroke is the third leading cause of death in Bangladesh (Islam et al., 2013). The World Health Organization ranks Bangladesh's mortality rate due to stroke as number 34 in the world (WHO, 2017). The exact statistics for stroke in Bangladesh are unknown. For this reason, stroke is a very major concern and important issue in BD at present.

Singam, Ytterberg, Tham & von (2015) stated that stroke is a neurological condition which affects the normal well-being of a person. There have Significant changes are seen after having the stroke. The physical, cognitive and psychological impairments resulting from a stroke can lead to a large range of activity limitations and participation restrictions (Singam, Ytterberg, Tham & von, 2015).

It is strongly linked to an increase the burden of care and loss of productivity (Patterson, 2018). An important social outcome of rehabilitation for working age stroke survivors is returning to work after stroke (Ntsiea, Van Aswegen, Lord & Olorunju, 2014). To reduce stroke related impairment and disability is the main goal of most of the stroke-rehabilitation strategies (Chang, 2015). Although the management of stroke in the acute stage has improved greatly, most of the post-stroke care will continue to rely on rehabilitation (Chang, 2015). Many kind literatures show that a big amount of stroke survivors cannot return to work (Patterson, 2018). Work is a large concept that could be defined solely as paid work (it may be employed or self-employed), or includes other occupations such as voluntary work and household work also and not working may also be divided into

numerous subgroups: students, retirees, unemployed and job seeking or unemployed but not available for work (Westerlind, Persson & Sunnerhagen, 2017).

Stroke impacts on a survivor's ability to participate in community activities such as return to work (RTW) and affect people who are within the working age (Ntsiea, Van Aswegen, Lord & Olorunju, 2014). As a result, the patient can't fulfill their role properly. It also hampers their participation as well as their occupation. (Ntsiea, Van Aswegen, Lord & Olorunju, 2014). The disable patients need to take rehabilitation service. Centre for the Rehabilitation of the Paralyzed (CRP) is a unique and specialized rehabilitation center in Bangladesh for the people with stroke. During completing a clinical placement in the Neurological Unit at CRP & Community Based Rehabilitation (CBR) placement in Sylhet, the investigator observed that stroke patients continue to struggle a lot in their life to return their productive life.

Morris (2011) state that the ability to return to work (RTW) after a stroke is an important issue for the stroke survivors within the working-age population. The reported RTW rate after stroke varies widely between different studies. An Australian study showed that RTW rate of 75% within the first year after stroke (Westerlind, Persson & Sunnerhagen, 2017). In Korea at 6 months post-stroke, 60.0% of patients who had an occupation before their strokes showed RTW (Chang et al., 2016). In South Africa, only 32% successfully returned to work after their stroke (Patterson, 2018). An Indian study, approximately half, 74 (52.5%), returned to work after stroke out of the 141 participants (Bonner et al., 2015). There has no study yet in Bangladesh about the return to work with stroke survivors from where the investigator can find the actual rate.

Return to previous work and well-being of living often seen as a goal of rehabilitation (Singam, Ytterberg, Tham & von, 2015). The proper rehabilitation helps the affected people to return their occupation. In order to ensure the proper rehabilitation and community reintegration of the affected individual, CRP is working with both the Multi-Disciplinary Team (MDT) and Interdisciplinary Team (IDT) approach to promote the most possible independence to their community after getting discharged from the hospital setting. A large amount of stroke survivors taking rehabilitation service from CRP in every

year, but there was no study on return to work with that stroke survivors. So, it is very important to conduct a study on RTW among them. That's why the researcher is interested to find the actual RTW rate of stroke survivors. This study investigated the status of RTW of stroke patients and also functional independence after 3 months of stroke.

1.2 Justification of the study

Stroke is an alarming medical problem in our country which can make disable of a stroke survivor or even cause of death. There have poor facilities of the rehabilitation services area in Bangladesh and also a few numbers of investigation about their rehabilitation services. CRP is one of the centers which is working with their rehabilitation and ensure the return to work by involving multidisciplinary team including Doctor, Occupational Therapist (OT), Physio Therapist (PT), Speech and Language Therapist (SLT), and others. The aim of occupational therapy is to facilitate activity performance by developing performance skills and ensure about the return to work of stroke survivors. Therapists educated patient with stroke about how to regain lost performance and compensatory technique. The main focus of occupational therapy treatment is to train of self-care, productivity and leisure activities. There is no exception in Bangladeshi occupational therapists. The result of the study will be helpful for the occupational therapist to prepare an appropriate treatment plan and provide better intervention.

Though there has enough rehabilitation service for stroke survivors in CRP but there has little study on return to work in CRP even in the whole country. This research will conduct that evaluate the engaging rate in productivity of stroke survivors after taking rehabilitation service. It also can be an evidence of the practice of intervention of CRP. By following this result CRP may improve or modify their treatment strategy in the future step which may be more helpful or effective for the stroke survivors. Return to work is an important issue of individual stroke survivor that's why Researcher felt very much interested in this area as a student of Occupational Therapy.

1.3 Operational Definition

Work: Activity involving mental or physical effort done in order to achieve a result.

Return to Work: To start working at one's job again. It is the act of coming back to his previous occupation from a place or condition. Return to work is a productive activity and it is a person's usual or principal work or business, especially as a means of earning a living.

Stroke: The sudden death of brain cells due to lack of oxygen, caused by blockage of blood flow or rupture of an artery to the brain. Sudden loss of speech, weakness, or paralysis of one side of the body can be symptoms.

Rehabilitation: The process of helping a person who has suffered an illness or injury restore lost skills and so regain maximum self-sufficiency.

2.1 Importance of return to work

The concept of work can be defined in different ways and for the purpose of this study, it shall be defined as “tasks they (people) perform for some form of remuneration (Patterson, 2018). A person can be self-employed or employed by an employer. Patterson (2018) stated that the word, Work may be categorized into formal and informal economic activities. Sansam & Kent (2009) think that work is a very important activity in an adult’s life; it helps the people to get a structure in their lives, recognized social status, opportunity/ opportunities for social interaction, a sense of belonging, and it promotes physical well-being over and above the income generated (Patterson, 2018). According to Hartke, Trierweiler & Bode (2011) Work is also a means by which a person can develop a sense of identity through the experiences, challenges, personal development and fulfillment achieved.

According to National stroke association (2018), Most of the people who RTW, do so within three to six months, with a second peak of RTW at 12 to 18 months after their stroke. Making the decision to return to work after a stroke can be difficult, but it is an important step for many survivors. Some of the stroke survivors are able to go back to their previous employer in the same position they were in before the stroke. Others may need modifications to their previous job including fewer hours and physical accommodations, and some may need training so they can change their work or move into a different field altogether. (National stroke association, 2018).

2.2 Epidemiology of Stroke

Stroke is a medical condition where the poor blood supply to the brain results in cell death. Many people are affected by stroke in every year in any age. Stroke can occur a disability of people at any time. Stroke can be defined as- “A stroke or Cerebrovascular accident (CVA) is caused by the interruption of the blood supply to the brain usually because a

blood vessel bursts or is blocked by a clot. This cuts off the supply of oxygen and nutrients causing damage to the brain tissue. The most common symptom of a stroke is sudden weakness or numbness of the face, arm or leg, most often on one side of the body. Other symptoms include confusion, difficulty speaking or understanding speech, difficulty seeing with one or both eyes, difficulty walking, dizziness, loss of balance or coordination, severe headache with no known cause, fainting or unconsciousness” (World Health Organization, 2015).

Every year approximately 5 million people achieve disability with stroke in the world (World Health Organization, 2014). Bangladesh is also a part of this large number. It is expected that about 2020 stroke will be the fourth highest cause of ongoing disease burden globally (Patterson,2018). Stroke, therefore, currently is and will continue to be an alarming public health problem (Patterson,2018).

2.3 Stroke and rate of return to work

Stroke is a very important reason for people having difficulties at work, or even being at risk of losing their job, was having invisible impairments (Balasooriya-Smeekens, Bateman, Mant & De Simoni, 2016). There have many studies were done in the United States of America, the United Kingdom, Japan and Sweden have shown that the rates of return to work widely vary from 1% to 91% with variances occurring among the countries as well as within the same country. (Patterson, 2018 & Duff et al., 2014). Returning to work of stroke survivors is a complex process which can be facilitated or hindered by organizational, social or personal factors, as well as accessibility to appropriate services (Brannigan et al., 2016)

According to the Duff et al. (2014) the wide range of RTW rates in the studies can be a result of different definitions of work used, varied age groups of participants, nature and severity of the stroke and the type of rehabilitation received, cultural factors and disability compensation programs etc. (Patterson, 2018). Stroke can restrict the productive life of a stroke survivor and also can decrease the quality of life which makes a critical situation for his or her family. Stroke also affects in return to the previous work and sometimes stroke

changes the working pattern of a person that's why they have to face a challenging work situation. Research shows that maximum improvement of post-stroke is seen within the first six months and, maximally, up to two years (Duff et al., 2014)

A study done by Duff in Johannesburg, South Africa found that 66.0% of stroke survivors (n=97) did not return to work after the stroke (Patterson, 2018). Of the 34% that could return to work, 86.7% returned to the same work as they before did and 63.3% resumed full-time employment (Patterson, 2018). Duff et al. (2014) deduced that either some employers were accommodating of their employees and/or recovery following the stroke was conducive for returning to work (Patterson, 2018). Bonner et al. (2015) have found that professional or business employment, lower mRS scores, 3 months post-stroke and younger age were associated with a successful return to work. The two most common reasons for not returning to work were upper limb dysfunction and walking difficulties and other barriers were poor memory, difficulty with speech and poor support and guidance from the health care professionals and also employers and the main facilitators were included: dislike of being bored, financial needs to support one's and family, enjoyment of work as well as supportive and understanding healthcare professionals and employers (Patterson, 2018).

There have many reasons may contribute to these findings thus, in the context of this study, Patterson (2018) used the International Classification of Functioning, Disability, and Health (ICF) to explore factors facilitating the RTW for stroke survivors.

2.4 The International Classification of Functioning, Disability, and Health (ICF)

The ICF is a universal and multi-purposive framework in which health and health-related domains can be classified (World Health Organization, 2002). These domains assist with describing changes in a person's body functions and Structures as well as assist in determining their capacity in a standard environment and their level of performance in their own environments following a health-related occurrence (WHO, 2002). It further looks at

environmental and personal factors that may influence a person's capacity and performance (WHO, 2002)

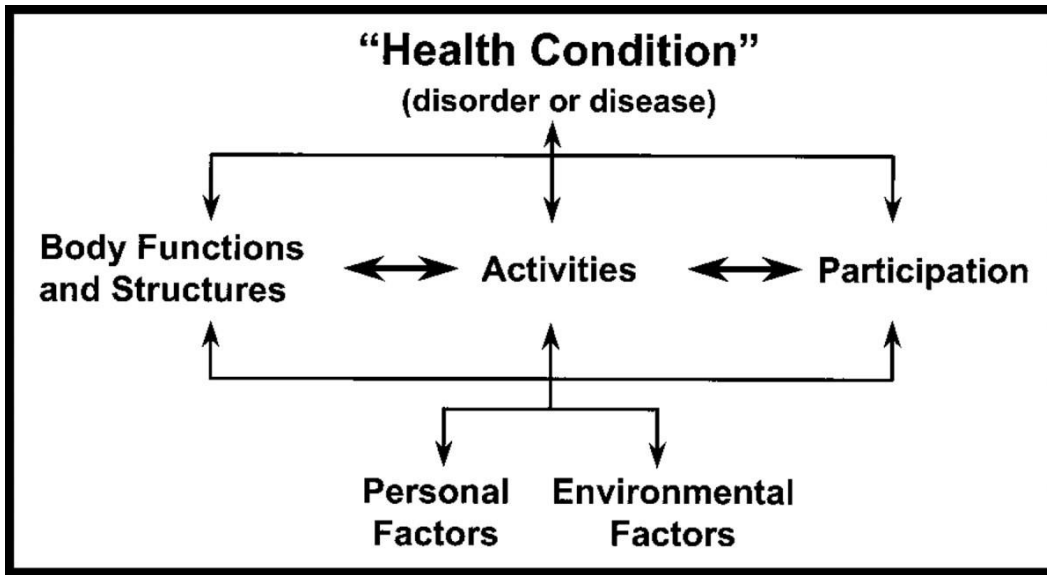


Figure-1: Diagrammatic presentation of the ICF (WHO, 2002)

2.5 Factors that influence return to work following a stroke

2.5.1 Body function, activity, and participation

Bonner et al. (2016) showed that stroke survivors who have higher functional abilities and when it is lower mRS scores have a greater likelihood of returning to work. It is a common understanding in the study that the extent and severity of the communicative, cognitive, physical and functional impairments, depression and fatigue are predictive for RTW (Duff et al., 2014 & Patterson, 2018). Gabriele & Renate (2009) found that cognitive impairment, especially the person with aphasia, is a poor prognostic factor for RTW. The stroke survivors who successfully returned to work had mRS scores that were indicative of no to minimal disability (Patterson, 2018). Gilworth et al. (2009) & Patterson (2018) found that persistent symptoms of the stroke such as concentration and attention difficulties, irritability, headaches, memory difficulties, and fatigue are often barriers for returning to work.

2.5.2 Personal factors

There have some studies which showed that women had an increased likelihood to return to work, whereas others showed that men had higher rates (Patterson, 2018). Male stroke patients with the return to work showed a better quality of life and also emotional status than those without RTW and in female stroke patients, there appeared to be no definite difference in the quality of life and emotional status according to RTW (Chang et al., 2015). Wang et al. (2014) showed that the marital status or the side of stroke did not have a statistically significant impact on the rates of RTW (Patterson, 2018). Gilworth et al. (2009) could not find a clear relationship between age and the rate of RTW however recent researcher Bonner et al. (2016), Harris (2014) & Wang et al. (2014) has linked younger age demographics at the time of the stroke have better RTW outcomes (Patterson,2018). Bonner et al. (2016), Harris (2014) & Wang et al. (2014) also showed that there has also a deep relation between education level and income to return to work Bonner et al. (2016) & Harris (2014) showed If the stroke survivors are more educated persons, then it is more likely they would have more skilled and administrative for upper class job which results in a higher income and that's ultimately improved return to work rates and those with lower levels of education usually they engaged in lower class job and ultimately get lower income (Patterson, 2018). Bonner et al. (2016) also found that the educational level of the stroke survivors is also a factor associated with return to work and higher education levels favors a successful return to work.

It is also visible that psychological factors such as stress low self-esteem, and depression have been identified as barriers to return to work (Duff et al., 2014). Bonner et al (2015) suggested that functional disability may be more important than anxiety and depression in a subject's return to work. Whereas (Balasooriya-Smeekens, Bateman, Mant & De Simoni, 2016) showed that acceptance of impairment, positive self-perception, self-motivation, and realistic goals have been working as enablers for RTW. Bonner et al. (2015) added that psychosocial factors may impact return to work as well, with support from patient's family, friends and coworkers being an important, positive influence on a patient's decision to RTW after his/her stroke.

Besides the functional disabilities, stroke survivors also have to face a number of cognitive and psychosocial barriers during RTW following their stroke that is not always explored (Bonner et al., 2015). Chang et al. (2015) have found that stroke survivors with RTW had better emotional status than those without RTW and also suggested that RTW could influence the quality of life and emotional status in stroke survivors with functional independence. The relationship between life satisfaction and prognosis for RTW are interdependent". Duff et al. (2014) found that stroke survivors who enjoyed more their jobs and they gained fulfillment were more likely to Return to work. Duff et al. (2014) and Patterson (2018) found that the most two common reasons for returning to work was financial needs and to out from boredom. According to Gilworth et al. (2009), it is more challenging to return to work once a stroke survivor who is dependent on non-work-related income sources such as social grants and/or benefits. Successful return to work of stroke survivors may improve economic circumstances, quality of life and overall life satisfaction, but not all stroke survivors are able to return to work (Bonner et al., 2015).

2.5.3 Environmental factors

Environmental factors such as support systems, accessibility of the workplace and transportation have been identified as potential barriers to RTW. (Balasooriya-Smeekens, Bateman, Mant & De Simoni, 2016; Duff et al. (2014). Duff et al. (2014) state that rehabilitation services, especially the vocational rehabilitation, can influence a person's ability to RTW. When minimal or no rehabilitation is received, a stroke survivor's skills might not be sufficiently retrained in the physical, cognitive or vocational domains for successful re-integration into the working area. Guidance from healthcare professionals can be seen as both a facilitator and a barrier to RTW. According to the medical professionals' view, the stroke survivors are often limited to that of being the patient and they may not take into account the larger social context of the survivors (Patterson, 2018). Gilworth et al. (2009) found that medical advice on delaying returning to work may be misguided and could be seen as a barrier (Patterson, 2018). Employers can be a facilitator or a barrier for returning to work. Balasooriya-Smeekens, Bateman, Mant & De Simoni, 2016; Bonner et al. (2016) discussed that being flexible and supportive, an accepting and understanding attitude towards disability, understanding stroke-related challenges and

providing accommodations are the enabling characteristics to RTW for the survivors. They also state that the employers could also hinder returning to work by being unsupportive, providing an extended leave of absence, having poor or limited knowledge and professionalism around disability in the workplace, concerns around productivity, or outside perception of the company and the company's performance (Patterson, 2018).

Employers face complex emotional and practical issues when helping an employee return to work after his stroke, for which many lacks of knowledge and experience (Balasooriya-Smeekens, Bateman, Mant & De Simoni, 2016). Brannigan et al. (2016) discussed that Communication between healthcare professionals and employers can support the return to work process for the stroke survivor, while environmental workplace adaptations and adjustments such as phased working and flexible work can help accommodate stroke survivors in the workplace. According to Bonner et al. (2015), the flexibility and attitudes of the employer and employment also seem to play an important role in one's ability to return to work. According to Bonner et al. (2016); Wang et al. (2014) discussed as high levels of support from family and friends can be an important and positive influence on a stroke survivor's ability to return to work and Bonner et al. (2016) stated that it can also be associated with faster and increased range of functional improvement. Communication between healthcare professionals and employers can aid the return to work process for the stroke survivor, while environmental workplace adaptations and adjustments such as phased working and flexible work can help accommodate stroke survivors in the workplace. Employers have an important role for the stroke survivors to play in the return to work process. Without their understanding and empathy, the process of return to work might be more challenging and complex as they might be less likely to be flexible, to implement reasonable accommodations and to try and understand the person's challenges (Patterson, 2018).

3.1 Research question

How many stroke survivors Return to Work after receiving rehabilitation service from CRP?

3.2 Study aim and Specific objectives

3.2.1 Aim: To identify the Return to Work status and associated factors of stroke survivors stroke survivors after taking rehabilitation service from CRP.

3.2.2 Specific objectives:

- To determine the status of stroke survivors who returned to work after receiving rehabilitation service from CRP.
- To explore the facilitators & hindrances that influence RTW post stroke.
- To find out factors associated with RTW.

3.3 Conceptual framework

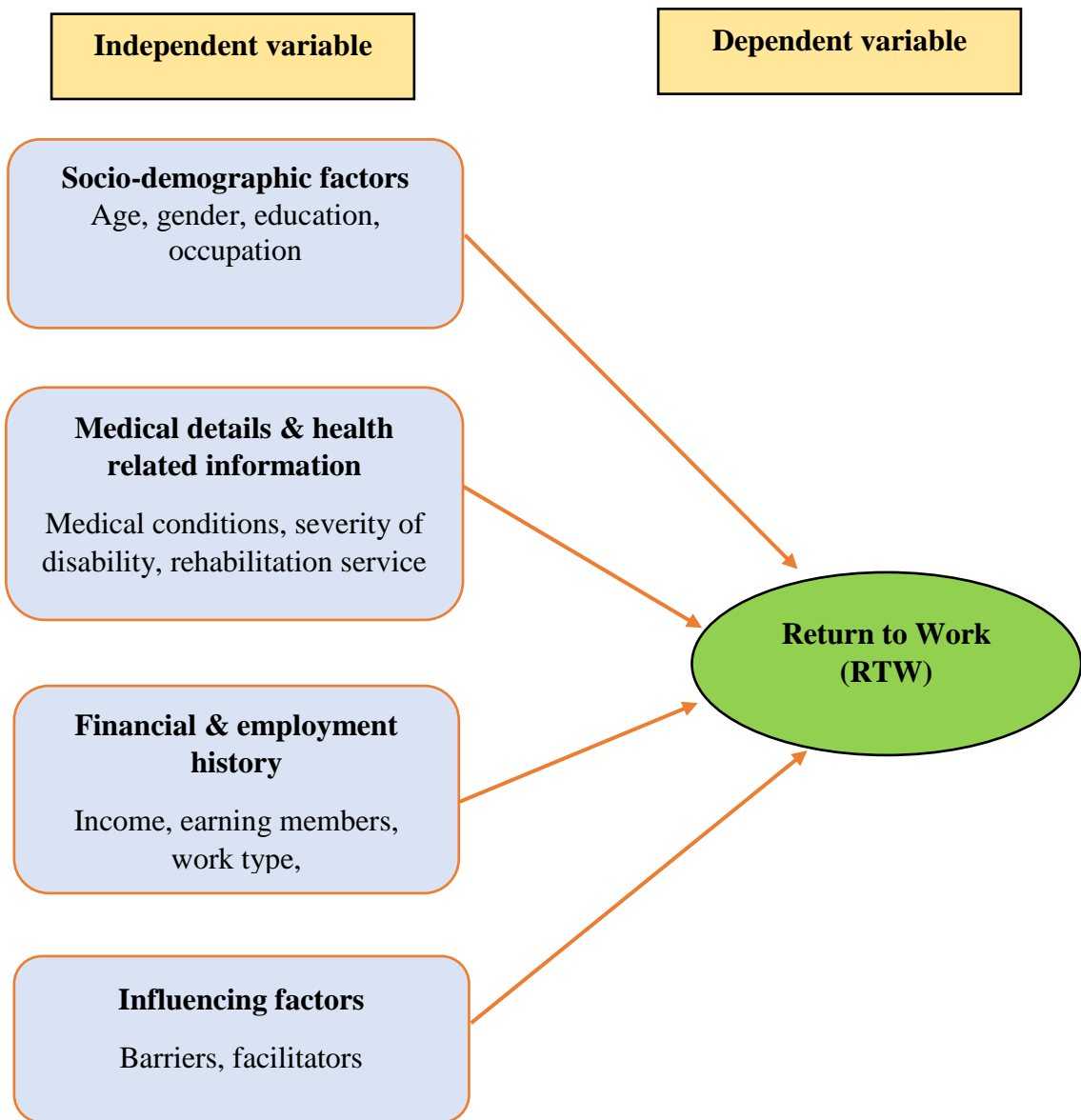


Figure-2: Conceptual framework of the study

3.4 Study design

This is a quantitative cross-sectional descriptive analysis research design. Quantitative method is an appropriate method to know the subject well-known, comparatively simple and clear (Bowling, 1997). Quantitative method is an easy way to collect information among large participant. The study was conducted by non-experimental cross-sectional survey research design. The researcher used this method to fulfill the aim and objectives of the study. The aim of this study is to identify the number of stroke survivors that have returned to work and the variables that facilitated or hindered RTW was explored. The researcher had chosen the design as a way of using large numbers of sample and then collecting data accurately. Cross-sectional study is known as a universal and conversant study design to conclude great populations at an exact point of time (Olsen et al., 2004). It is an easy way to collect information among a large number of populations in a short time. For this reason, the researcher used this method for this study. Besides them, as a result of having a small size of the sample group descriptive analysis was used.

3.5 Study population

The stroke survivors who had received the treatment from October 2016 to September 2018 from CRP & fulfill the inclusion and exclusion criteria of this study were the population of this study.

3.6 Study setting

The study was conducted in the community (Savar, Dhamrai, Mirpur) setting after taking information from Occupational Therapy outpatient unit and Stroke rehabilitation unit (SRU) of CRP-Savar which is situated under the Dhaka district.

3.7 Study period

The study was done as part of the academic education of B. Sc. In Occupational Therapy from August 2018 to March 2019. The study was conducted through proposal writing,

taking permission, data collection, data analysis, and overall thesis writing. In particular data collection was conducted from December 2018 to January 2019.

3.8 Sample size

The standard sample size was large. As this study was the basis on purposive sampling, and there was a too short time for data collection so the investigator had to conduct this study with 48 samples.

3.9 Inclusion and exclusion criteria

3.9.1 Inclusion criteria:

- Medical diagnosis of patient with stroke only included in this study and other neurological condition had excluded from the study (Amosun, Nyante & Wiredu, 2013)
- Male and female both stroke survivors (between 18 to 60 years old) were included in this study.
- Receiving at least 03 (Three) months rehabilitation service within two years and who are both formally and self-discharged from CRP.

3.9.2 Exclusion criteria:

- People who have severe disease or injury or any psychiatric conditions that could be a limiting factor for return to work.
- Were unemployed or not working three months or longer prior to the stroke.

3.10 Sampling techniques

Sampling is an important part of survey research and it is an approach more systematically in relation to the specific aims, purposes or hypothesis of the research. The purposive sampling was used in this survey-based research. By purposive sampling, sample knows about the purpose of the study and provides information about the question from their knowledge. The investigator has used the purposive sampling to get more accurate data

from participants & he collected data from patients with stroke on the base of inclusion and exclusion criteria.

3.11 Data collection tools

To fulfill the aim and objective of the study researcher used the following tools during the data collection period:

- Information sheet and consent form
- Questionnaire: A developed questionnaire (Factors That Influence Return to Work After Stroke)
- Paper, pen, pencil.

3.11.1 Information sheet and consent form

An information sheet is very important for the participants that make sure the participant to participate in the research (King's College London, 2019). An information sheet is necessary to inform the participant about the identity of researcher, institute affiliation, research related information such as title, aim, period, duties and privileges of participants. To provide information about the researcher and his subjects, the researcher had to develop an information sheet in a preferable language which is clearly known to the participants.

The Consent form is another essential part where the person consents to do something. A consent form is necessary for a study and it is a standard way to get clearance or agreement of participation legally which is important before initiating the collect data of any kind of research. To take consent from subjects and inform the participants about research and researcher, he had to developed an information sheet & consent form in both Bangla and English language and also used it during data collection (Appendix- III & IV).

3.11.2 Questionnaire (Factors That Influence Return to Work After Stroke)

The data was collected by using a developed, structured questionnaire (Appendix- V & VI) which was used in another study conducted by Patterson (2018). The questionnaire was also based on one used in a similar study conducted by Duff et al. (2014). The main

difference between the two questionnaires was the use of the International Classification of Functioning, Disability, and Health (ICF) as a framework (WHO, 2002). There had to adapt on demographic part according to the feedback of the researcher's supervisor and suggestion of scale investigators.

The questionnaire comprised of the following six sections:

Section A: Demographic and medical information;

Section B: Financial and work history;

Section C: Determining factors for successful RTW (administered only if the participants successfully returned to work);

Section D: Determining factors for having stopped working after initially returning to work (administered only if the participants had initially returned to work but had since stopped);

Section E: Determining factors for not returning to work (administered only if the participants had not returned to work in any way) and;

Section F: The Modified Ranking Scale (Wilson et al., 2002) – Determining the participants level of functioning at the time of the study.

Section A, B, and F were completed with all participants, while sections C, D, and E were completed with those fitting the relevant past and current work status. The content validity of the questionnaire was determined by a reference group of peers who had neuro-rehabilitation and/or vocational rehabilitation experience (Patterson, 2018)

3.12 Data collection method

The study population was identified and was contacted through telephone. After confirmation, the researcher went to the community and conducted face to face interview with a semi-structured question for data collection and it was “Factors That Influence Return to Work After Stroke” a questionnaire to explore the “Return to Work of Stroke

Survivors after Taking Rehabilitation Service from Centre for the Rehabilitation of the Paralyzed” that might take 40 to 50 minutes and had no likelihood of any harm to the participants. With semi-structure question participants got more freedom to explain their opinions. Face to face interview was helpful for the researcher to determine participants understanding of questions by observing their facial expressions. A total of 250 people was identified. The total participants of this study were 48.

3.13 Data management and analysis

The RTW rate of stroke survivors was calculated as a percentage. The researcher has captured the data by using IBM SPSS 20 and Microsoft Office Excel. Data were mainly categorical in nature and descriptive analysis was done with assistance from the person who has knowledge about statistics and also the support of the supervisor.

3.14 Quality control & quality assure

Before the time of final data collection, a field test was conducted with three participants because it was necessary to conduct a field test to help the researcher for purifying the data collection plan. During the interview sessions, the investigator informed the participants about the aim and objectives of the study. From the field test the researcher was aware of which part of the questioning participant found difficulty or they did not understand properly and he also observed the situation of the interview; participant’s response and modify the questionnaire where necessary according to the permission of the author of the scale. Finally, the question was translated English to Bangla language (Appendix- VI) by maintaining proper procedure.

3.15 Ethical consideration

First of all, this study proposal was sent to the authority for the further suggestion, modification and so on. Then the final version of the protocol was submitted along with an application for seeking the permission of data collection. Before starting, data collection permission was taken from authority by maintaining a proper chain of command. Information sheet and consent form were provided to each participant. The aim and

objectives were also clearly described in the information sheet and consent form. Investigator informed verbally about the topic and purpose of the study to the participants. The investigator assured them that confidentiality of personal information will be strictly maintained in the future. The Investigator ensured that the service of the patient will not be hampered from their participation in this study. The participant had full right to withdraw their participation from this study at any time. The Investigator also committed not to share the information given with others except the research supervisor.

4.1 Demographic and medical details

Forty-eight (48) stroke survivors participated in this study whose mean age was 45.92 (SD \pm 9.832) years and maximum age 60 and minimum age 26 years. In that participants n=3 (6.3%) were in 18-30 years, n=14 (29.2%) were in 31-40 years, n=16 (33.3%) were in 41-50 years and n=15 (31.3%) were in 51-60 years old.

Table- 01: Socio-demographic and medical characteristics of the participants (n=48)

		Total (n)	Percentage (%)
Age	18-30 years	3	6.3
	31-40 years	14	29.2
	41-50 years	16	33.3
	51-60 years	15	31.3
Gender	Male	37	77.1
	Female	11	23.9
Marital status	Not married	2	4.2
	Married	43	89.58
	Divorced	1	2.08
	Widowed	1	2.08
	Separated	1	2.08
Educational status	Graduate	11	22.9
	Higher secondary	3	6.3
	Secondary	18	37.5
	Primary	6	12.5

	Illiterate	10	20.8
Side of weakness	Right	21	44
	Left	26	54
	Both	1	2
Stroke types	Ischemic	40	83.3
	Hemorrhagic	8	16.7
Stroke duration	3 to 7 months	17	35.4
	8 to 12 months	13	27.1
	13 to 17 months	7	14.6
	18 to 22 months	3	6.3
	>22 months	8	16.7
Previous stroke	No	40	83.3
	Yes	8	16.7
Others medical conditions	Yes	41	85
	No	7	15
Employment type	Self-employment	23	48
	Employment by others	25	52
Sick leave	Yes	23	48
	No	25	52
Disability benefit	Yes	5	10
	No	43	90

The study showed that most of the stroke survivors stroke duration were within 3 to 7 months and it was 35.4% (n=17) and others rate were 27.1% (n=13) about 8 to 12 months, 14.6% (n=7) about 13 to 17 months, 6.3% (n=3) about 18 to 22 months and 16.7% (n=8) in more than 22 months.

The study also showed that 16.7% (n=40) participants had the previous stroke, and 83.3% (n=8) did not have. The duration of the previous stroke had occurred within 1-5 years. About 85% (n=41) had other medical condition which might act as barriers for return to work of the participants.

Table-2: Comorbidities reported by stroke survivors (n=41)

Co-morbidity	Total n= 41	Percentage
High blood pressure	35	85.37%
Diabetes	21	51.22%
Headache	7	17.1%
Arthritis	6	14.63%
Depression	3	7.32%
Epilepsy	1	2.44%

4.1.1 Rehabilitation services

The researcher has found about 50% (n=24) participants took 3 months rehabilitation services. The other rates were 14.6% (n=7) about 4 months, 6.3% (n=3) about 5 months, 6.3% (n=3) about 6 months, 12.5% (n=6) about 7 months, 4.2%(n=2) about 8 months, 2.1% (n=1) about 10 months or above.

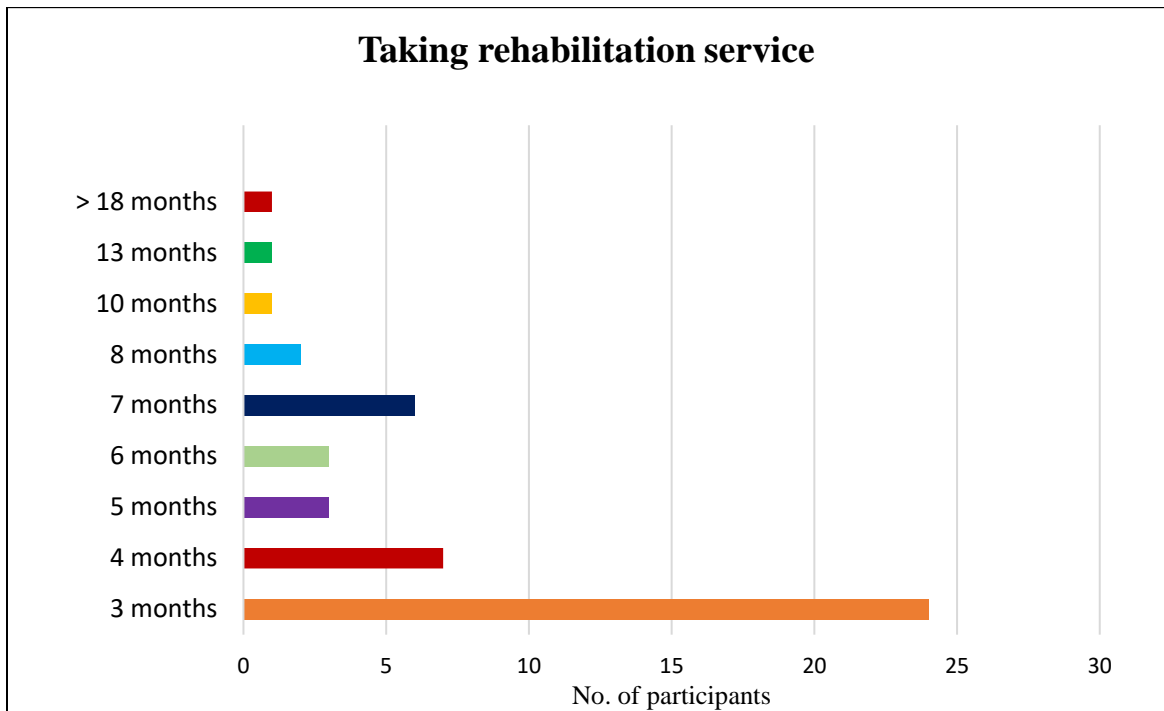


Figure-03: Taking rehabilitation services of the participants

4.1.2 Severity of disability rate

Modified Ranking Scale (mRS) showed that 10.4% (n=5) participants had no symptoms, 22.9% (n=11) had no significant disability, 20.8% (n=10) had slight disability, 29.2% (n=14) had moderate disability, 16.7% (n=8) had moderately severe disability.

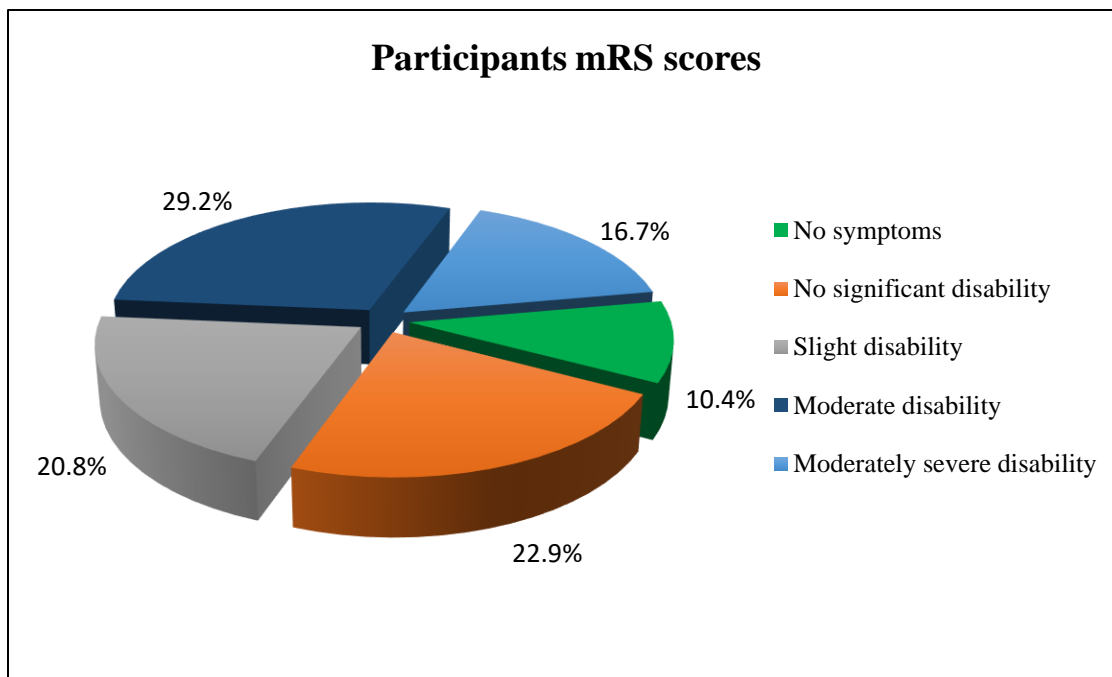


Figure-04: Participants mRS score

4.2 Financial and work type details prior to suffering a stroke

4.2.1 Occupational category

The study showed that most participants were engaged in the job (33.3%) and domestic work (25%). Some were businessman (16.7%), shopkeeper (6.3%), day labor (8.3%), teacher (2.1%), engineer (2.1%), farmer (2.1%), and others (4.2%).

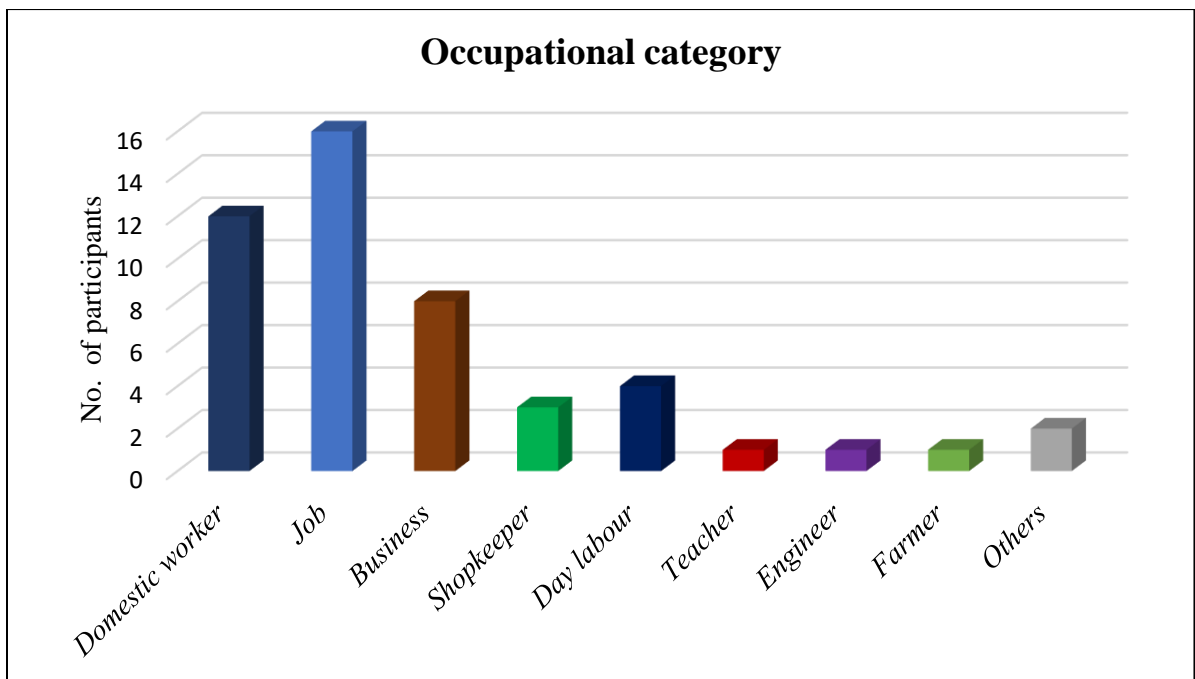


Figure-05: Occupational category of the participants

4.2.2 The main earning members

The study shows that about 69% (n=33) stroke survivors were the main earning members before their stroke and 31% (n=15) had the alter earning members. Before the stroke, the survivor's full family depends on their income and after following their stroke it might hamper on their occupation, income, and their family. Among them still, 17 persons are the main earning members of their family. The rest of 16 participants are not yet as main and their opinion is there has changed the main earning members position by the support of their husbands, wives, fathers, sons, rent of house or stalls, and support of relatives.

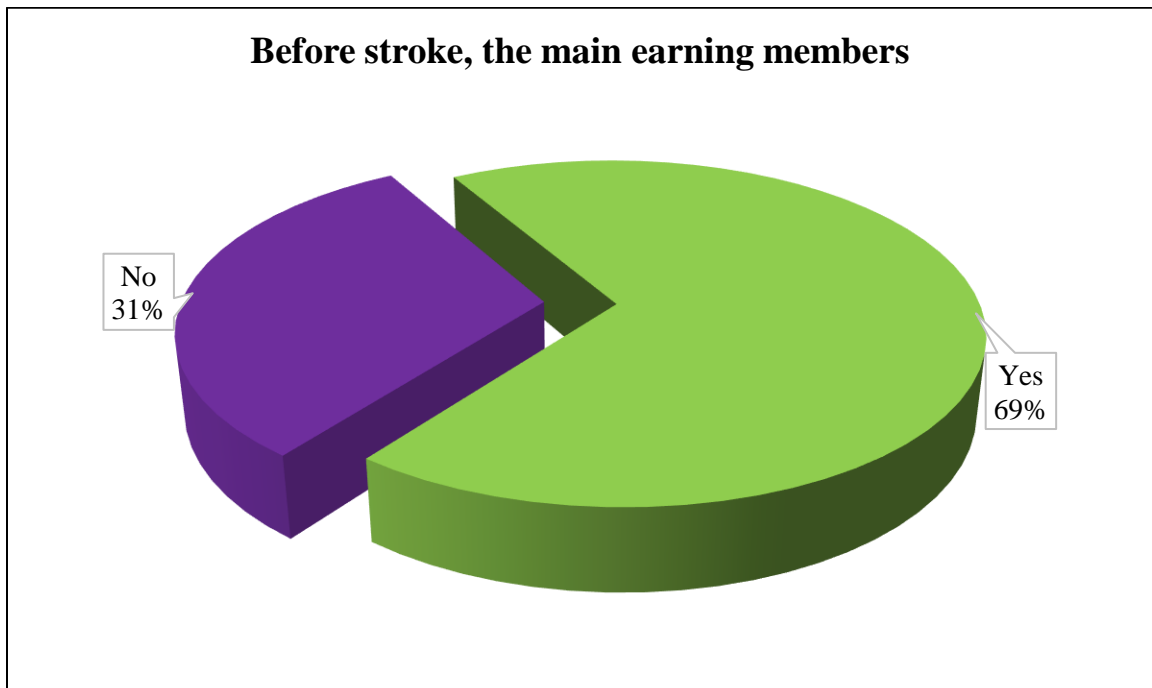


Figure-06: Main earning members of the participants

4.2.4 Monthly income

The graph shows that most of the stroke survivors present (45.8%, n=22) monthly income is about five thousand or its below. It's a few amounts of the number of monthly incomes more than forty-five thousand among stroke survivors.

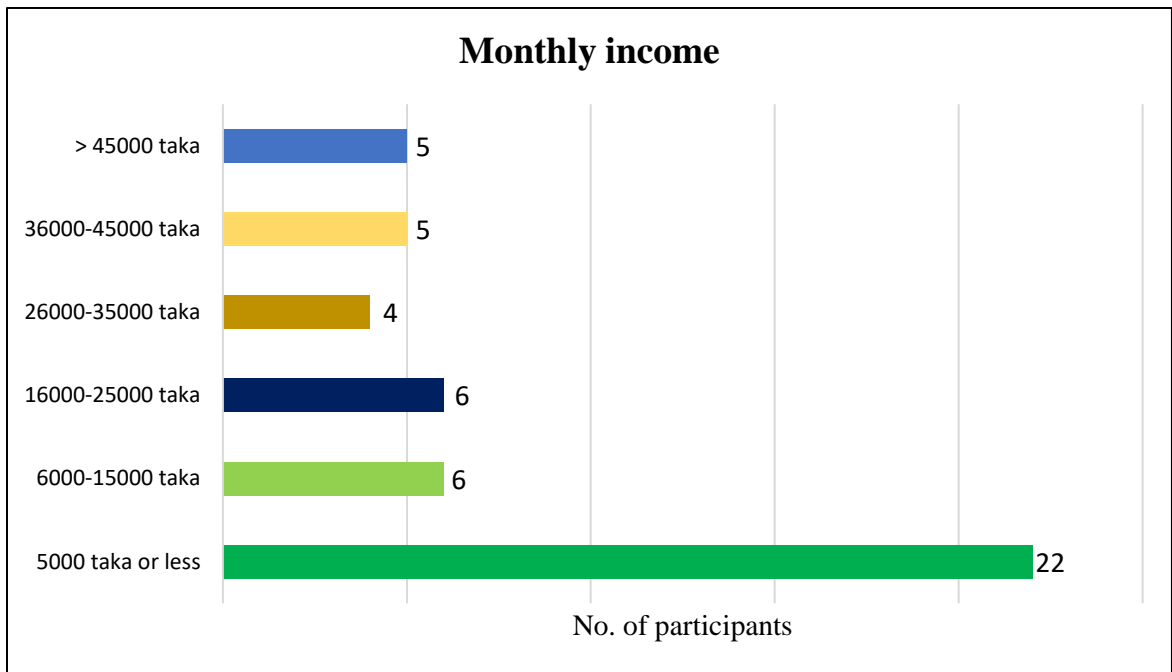


Figure-07: Monthly personal income of the participants

4.3 Return to work-related history

4.3.1 Rate of return to work

Of the 48 participants, n=20 (41.7%) returned to work, n=3 (6.3%) initially returned to work, but have since stopped due to challenging in the workplace, and n=25 (52.1%) never returned in their work.

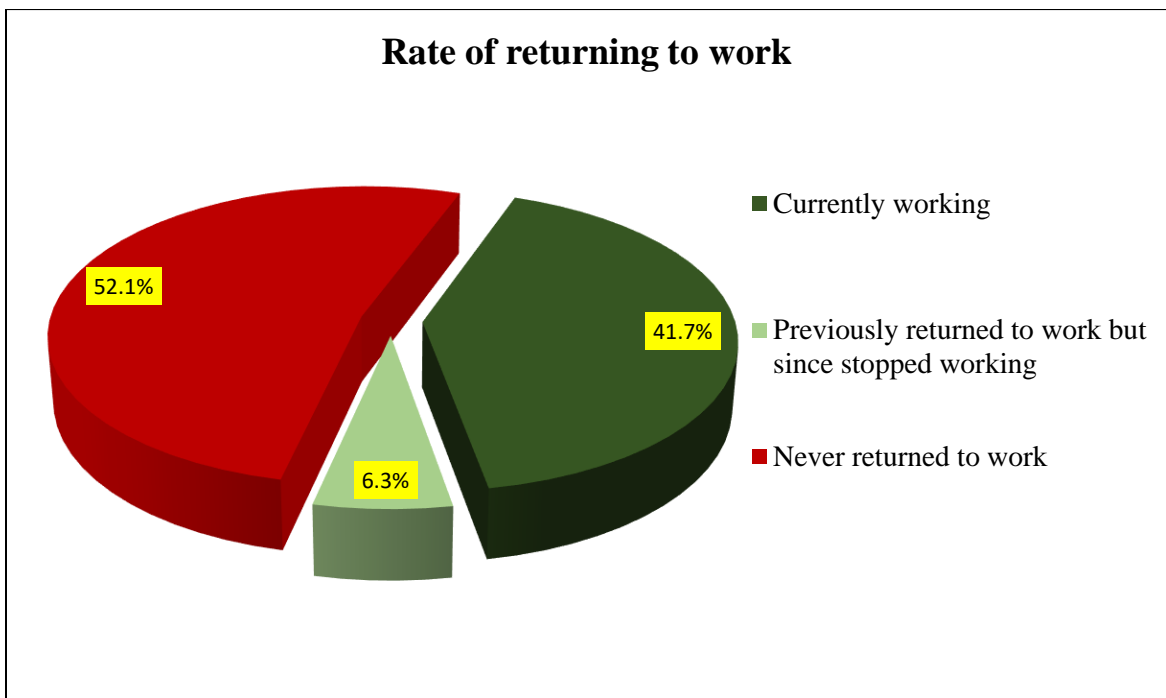


Figure-08: Rate of return to work of the participants

4.3.2 Duration of returning to work

In this study, about 20 stroke survivors could return to their productive work successfully out of 48 participants. Among them, who returned to work 12 (60%) participants returned their work within 1 to 6 months, 6 (30%) participants returned within 7 to 12 months and rest of 2 (10%) participants could return to work 13 to 24 months.

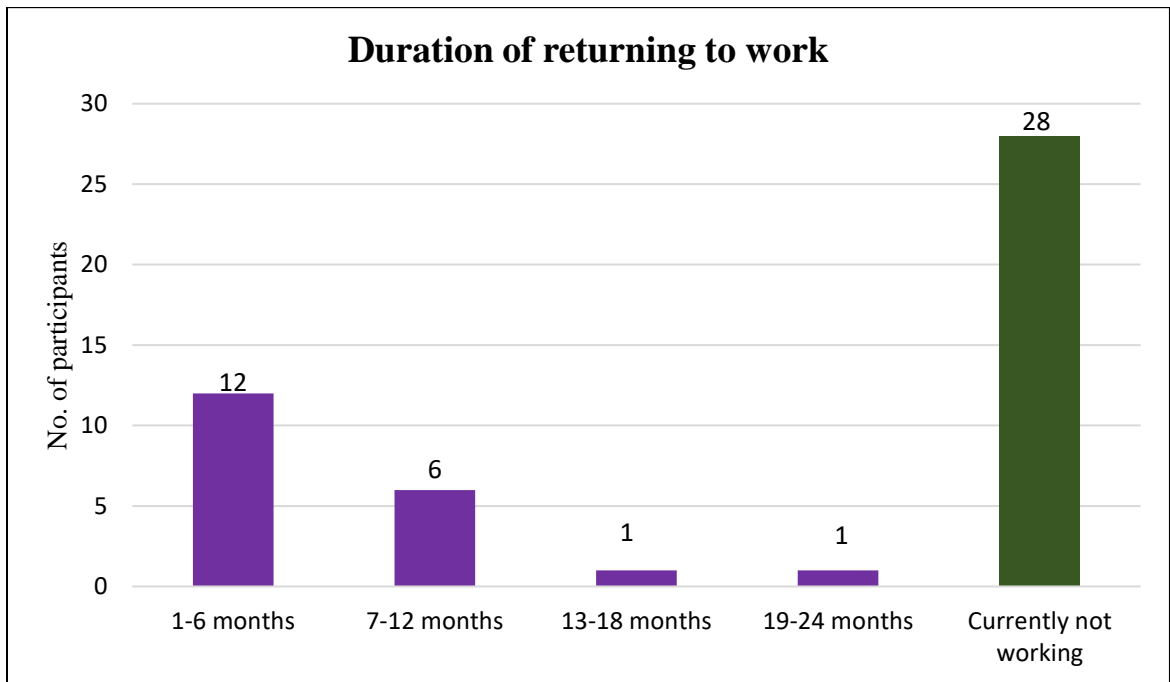


Figure-09: Duration of returned to work of the participants

4.3.3 Duration of sick leave

This study displayed that 48% (n=23) stroke survivors had received their sick leave and 52% (n=25) persons did not get any sick leave. The persons who got their sick leave of them about 43.48% (n=10) got for six months, 8.7% (n=2) got for 2 months, 4% (n=1) got for 3 months, 13% (n=3) got for 4 months, 21.74% got for 5 months, 4% (n=1) got for 7 months, 4% (n=1) got for 10 months and 13% (n=3) got for 12 months sick leave. Only 60.87% (n=14) stroke survivors were paid for their sick leave.

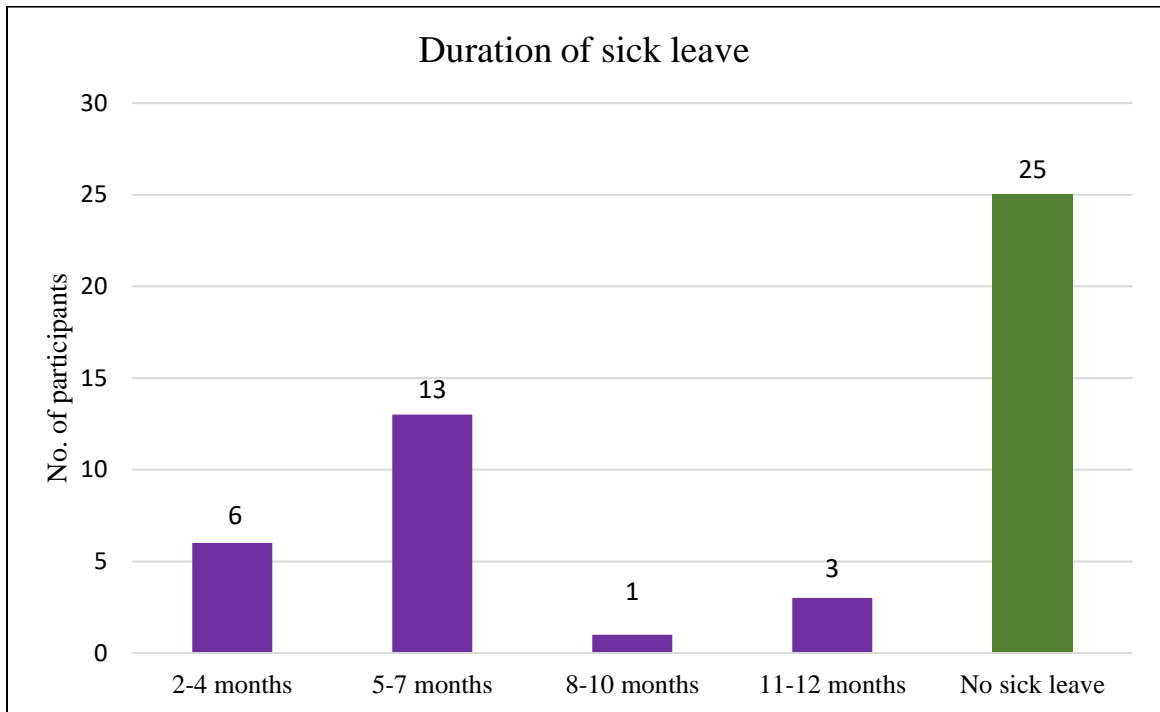


Figure-10: Duration of sick leave of the participants

The study also exposed about disability benefit also and about 10% (n=5) stroke survivors had got their disability benefit from Government, company, friends or relatives and rest of 90% (n=43) participants said that they did not get any disability benefit.

4.3.4 mRS scores compared to RTW

The table- 03 shows that in this study, all the participants who successfully returned to work had mRS scores that were indicative of no to minimal disability and who never returned to work after a stroke, most of them mRS score was moderate to severe disability. The other participants (n=3) who took a step to return to work but had to stop due to their impairment or environmental factors, most of them had mRS score minimal disability.

Table -03: mRS scores compared to return to work status (n=48)

	No significant disability (mRS 0 to 2)	Moderate to severe disability (mRS 3 to 5)	Total
Successfully returned to work	19	1	20
Returned to work, but have since stopped	2	1	3
Never returned to work	5	20	25

Table-04: Association between factors with Return to Work group and Non-Return to work group (n=48)

Factors		RTW (Yes)	RTW (No)	P Value
Age	18-30 years	2	1	
	31-40 years	8	6	
	41-50 years	7	9	0.012
	51-60 years	3	12	
Period since stroke	3 months to 7 months	5	12	
	8 months to 12 months	6	7	0.051
	13 months to 17 months	4	3	
	≥18 months	5	6	
Type of stroke	Ischemic	18	22	0.190
	Hemorrhagic	2	6	
Taking rehabilitation service	3 months			
	4 months	7	17	
	5 months	2	5	
	6 months	2	1	0.019
	7 months	2	1	
	8 months	4	2	
	10 months	1	1	
	≥11 months	2	1	
Monthly income	≤ 5000 taka	7	15	
	6000-15000 taka	3	3	
	16000-25000 taka	2	4	0.024
	26000-35000 taka	2	2	
	36000-45000 taka	3	2	
	> 45000 taka	3	2	
Participants mRS scores	No symptoms	5	0	
	No significant disability	7	4	
	Slight disability	6	4	0.000
	Moderate disability	1	13	
	Moderately severe disability	1	7	

4.4 Phase one- Barriers to return to work

The study showed that the main barriers of return to work for the stroke survivors were poor functional use of affected arm and leg, difficulty with speech. There had also a large number of barriers that have been identified including: Low energy, poor memory, difficulty with vision, dizziness, pain, demotivated, attitude of superiors, attitude from subordinates, accessibility, poor concentration, difficulty with hearing, difficulty with thinking skills, self-sufficient and tires easily. Others perceived barriers included: poor balance, fear of falling, other medical related conditions, difficulty with going to the toilet or incontinence.

For those participants that had previously returned to work (n=3), but have since stopped, the main barriers for successful reintegration were environmental barriers and poor ability of functional use of the affected arm. The survivors could return to their previous jobs but had changed their work types and also responsibilities.

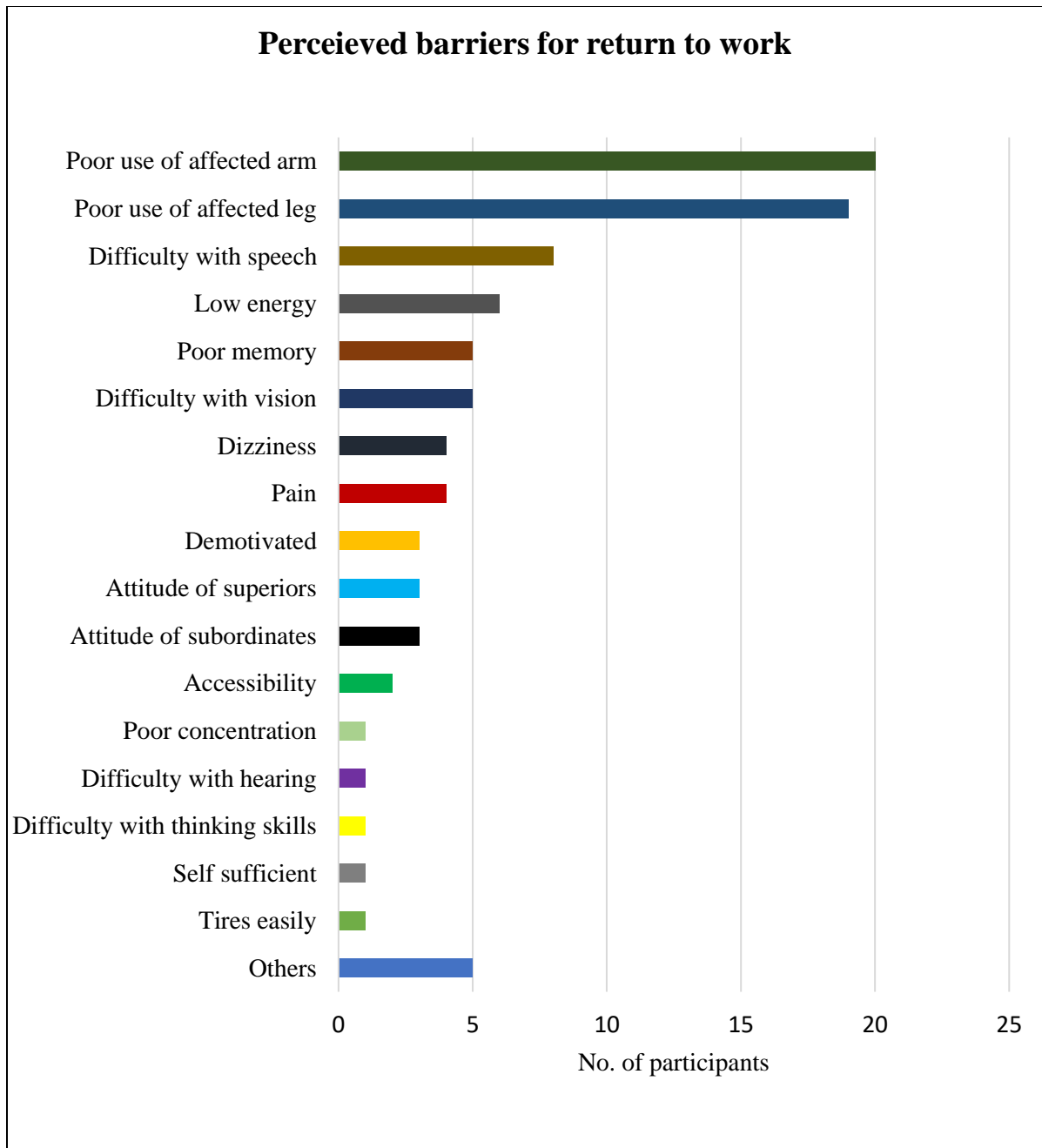


Figure-11: Perceived barriers for return to work

4.5 Phase two- Facilitators for return to work

As seen in figure 12, the family take care is the most influencing factors for return to work, besides it, get well, boredom, enjoyment of work, financial, job-saving, personal development, pressure from family and motivation from family were also important facilitating factors for the stroke survivors during returned to work.

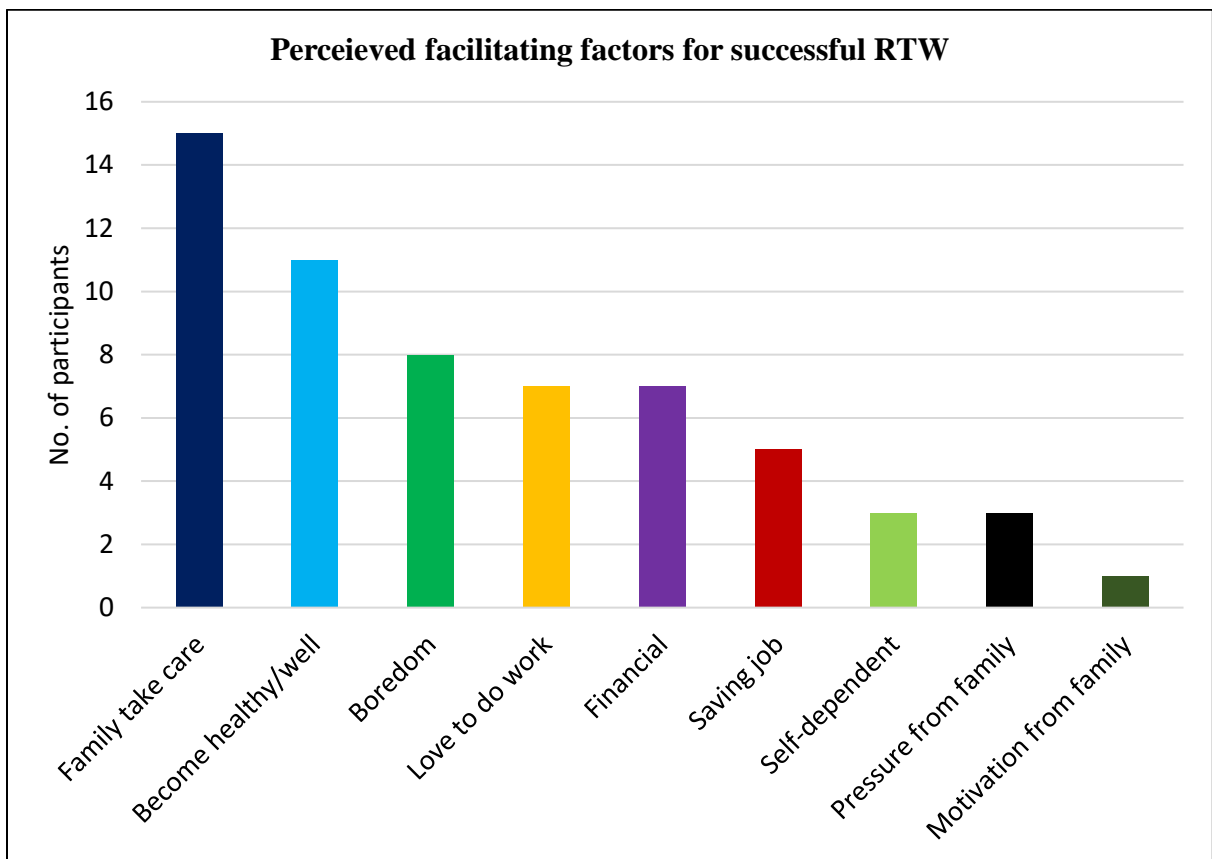


Figure-12: Perceived facilitating factors for successful RTW

5.1 Discussion

The study was conducted through forty-eight (48) stroke survivors who took at least three months of rehabilitation service from the Centre for the Rehabilitation of the Paralyzed (CRP) which is situated at Savar in Dhaka. Of the total participants of the study 41.7% stroke survivors returned to work where Patterson (2018) got 32% returned to work in South Africa. In India, 52.5% could return to work (Bonner et al., 2015). Duff et al. (2014) also found in his study about 34%. However, 58% of participants were unemployed which is indicating a large amount.

The stroke survivors who returned their work successfully about 60% of participants returned their work within 1 to 6 months. 30% of participants returned within 7 to 12 months and the rest of 10% of participants could return to work 13 to 24 months. As the first six months rehabilitation process occurs quickly so it is necessary to increase the percentage more. Though Ntsiea, Van Aswegen, Lord & Olorunju (2014) have found 60% in their study in South Africa for the first six months.

The stroke survivors who had participated in this study their mean age was 45.92 (SD \pm 9.832) years where 49.65 (SD \pm 9.644) was found in Patterson (2018) study and maximum age 60 and minimum age 26 years. The age is an important factor for the stroke because the older age people are the more vulnerable to be affected by stroke and the young age people may be more active to take rehabilitation service.

In this study, the researcher had found more rate of stroke among males (77.1%) than females (22.9%) and it varies on the environment, lifestyle, stress, occupation, medical health condition. In this study, most of the participants (89.58%) were married and Bonner et al., (2015) also found 89% which is similar to this study.

The stroke survivors had stroke most of them were educated 66.7% and less completed primary education or were illiterate (33.3%) it is also similar to the Bonner et al. (2015) study where 70% said that the participants completed at least high school level.

The study represented that a significant number of respondents 44% were right side affected where nearly 54% were left sides affected. There has a small size affected on both side (2%). The study showed that the duration of stroke was within 3 to 7 months (35.4%) and others rate were 64.6% about 8 to 22 months.

The researcher found a large number of ischemic stroke (83.3%) where the hemorrhagic stroke was 16.7%. In South Asian countries, ischemic stroke occurs among patient with stroke due to hypertension, diabetic, embolism, lifestyle and food habits and patient with ischemic stroke get excellent improvement in 27%, good improvement in 50%, and poor improvement in 23% time (Razzaq, Khan & Baig, 2002). There was 82% ischemic stroke in India found by Bonner et al. (2015) study.

Almost half (50%) of the stroke patients took 3 months of rehabilitation service. The other rates were 14.6% about 4 months, 6.3% about 5 months, 6.3% about 6 months, 12.5% about 7 months, 4.2% about 8 months, 2.1% about 10 months or above. This result indicates not continue rehabilitation service by the stroke survivors. The study showed that most of the patients (83.3%) experienced had first-time stroke where 16.7% of patients had the previous stroke and it was within 5 years. For the first-time stroke user have poor knowledge about rehabilitation and also functional use of their extremities.

Among the patients, about 85% had other medical condition which might act as the barriers for return to work. In co-morbidities about 85.37% had high blood pressure, 51.22% had diabetes, 17.1% had headache, 14.63% had arthritis, 7.32% had depression, 2.44% had epilepsy and 39% had others disease. For the presence of high blood pressure, diabetes, arthritis or others co-morbidities it is lengthy to return to work for the stroke survivors.

Modified Ranking Scale (mRS) showed that 10.4% participants had no symptoms, 22.9% had no significant disability, 20.8% had a slight disability, 29.2% had a moderate disability, 16.7% had a moderately severe disability. In this study, the participants (41.7%) who could

successfully return to their work had mRS score that were indicative of no to minimal disability where, Patterson (2018) found that about 32.5% had no significant disability who successfully returned to work, and who never returned to work after stroke, most of them mRS score was moderate to severe disability. The others participants (6.3%) who took step to return to work but had to stop due to their impairment or environmental factors, most of them had mRS score minimal disability and in Patterson (2018) study all participants had no significant disability who had stopped working after returned to work.

The study showed that most of the participants were engaged in job (33.3%) and domestic work (25%). Some were businessman (16.7%), shopkeeper (6.3%), day labor (8.3%), teacher (2.1%), engineer (2.1%), farmer (2.1%), and others (4.2%). About 69% of stroke survivors were the main earning members before their stroke and 31% had the alter earning members. Before the stroke, the survivor's full family depends on their income and after following their stroke it might hamper on their occupation, income, and their family. Most of the stroke survivors (45.8%) monthly income is about five thousand or it is below which is very poor for livelihood. It's a few amounts of number (10.42%) of monthly incomes more than forty-five thousand among stroke survivors.

This study displayed that 48% of stroke survivors had received their sick leave and most of them got two to six months and 52% of persons did not get any sick leave. The patients who got sick leave only 68.87% was paid. The study exposed about disability funding also and about 10% of stroke survivors had got their disability benefit from Government, company, friends or relatives which was a very poor number.

The main barriers of return to work for the stroke survivors were poor functional use of affected arm and leg and also difficulty with speech. There had also a large number of barriers that have been identified including: Low energy, poor memory, difficulty with vision, dizziness, pain, demotivated, attitude of superiors, attitude from subordinates, accessibility, poor concentration, difficulty with hearing, difficulty with thinking skills, self-sufficient and tires easily. Where the others study by Duff et al. (2014) & Patterson (2018) had similar findings. Others perceived barriers included: poor balance, fear of falling, other medical related conditions, difficulty with going to the toilet or incontinence.

For those participants that had previously returned to work but have since stopped, the main barriers for successful reintegration were environmental barriers and poor ability of functional use of the affected arm. The survivors could return to their previous jobs but had changed their work types and also responsibilities.

Family take care was the most influencing factors for return to work, besides it, become well, boredom, enjoyment of work, financial, job-saving, personal development, pressure from family and motivation from family were also important facilitating factors for the stroke survivors during returned to work. Most of the participant's response as a family take care where in Patterson study finds 'dislike of being bored'.

5.2 Limitation

- The sample size was too small to be represented as the large population.
- The questionnaire was not tested for reliability and concurrent validity.
- It was only a quantitative study. It should also be done qualitative study among the participants to find out the actual influencing factors of return to work for the stroke survivors and also the association with factors.
- A qualitative study for establishing reasons to RTW or no RTW would have enabled the investigator to draw more detailed information from the study populations.
- The information was taken from the caregivers when stroke survivors had cognitive or speech difficulty.

5.3 Conclusion

The study shows a low rate of return to work of stroke survivors. As most of the barriers are impairment-related and affected in hand and leg it should be increased one-handed technique and also improve functional use of client's extremities. The therapist also should have knowledge about return to the work-related facilitators and barriers to reach their ultimate goal which will make sure them that the patients are in their previous work. On the basis of this study, it is very necessary to improve communication among therapists,

stroke survivors and patient's family members or caregivers about rehabilitation service, client's occupation and return to work.

5.4 Recommendation

- There needs to be a broader focus on increasing RTW after stroke not only Dhaka district, but also in whole Bangladesh.
- It should be necessary to improve communication between therapist, stroke survivors about rehabilitation service and clients return to work.
- The therapists also need to advocate for and support their patient until reintegration into work as their main goal is to return to work.
- As the term 'work' is very important for Occupational Therapists (OTs) on their treatment procedure so, it should be more aware of stroke survivors and their return to work and also update OTs knowledge.
- Further research should conduct a large number of participants and also be done in the mixed method for accurate information from the stroke survivors.

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Appendix- I: Approval Letter for conducting study

18th October, 2018

The Chairman
Institutional Review Board (IRB)
Bangladesh Health Professions Institute (BHPI)
CRP- Chapain, Savar, Dhaka- 1343, Bangladesh
Subject: Application for review and ethical approval.

Sir,

With due respect, I would like to draw your kind attention that I am a student of 4th year B. Sc. in Occupational Therapy course at Bangladesh Health Professions Institute. For the requirement of my course curriculum I have to conduct a research project. My research title is: **"Return to Work of Stroke Survivors after Taking Rehabilitation Service from Center for the Rehabilitation of the Paralyzed"** that will be supervised by Md. Julker Nayan, Associate Professor, Department of Occupational Therapy, BHPI, CRP. The purpose of the study is to explore how many stroke survivors returned to work after taking rehabilitation service from CRP. 'Factors that influence return to work after stroke' is a self-developed semi structured questionnaire that will be used during face to face interview with the participants. The study will not be cause of any harm to the participant. Data collectors will receive informed consents from all participants as written record. Any kind of collected data will be kept confidential.

Therefore, I look forward to having your kind approval for the research proposal and to data collection. I also assure you that I will maintain all the requirements for study.

Sincerely yours,

Sujon Ahmed

Sujon Ahmed
Session: 2014-2015
Student ID: 122140145
4th Year Student of B. Sc. in Occupational Therapy,
BHPI, CRP, Savar, Dhaka- 1343, Bangladesh

Recommendation from the thesis supervisor & Head of the department:

Thesis supervisor: Md. Julker Nayan Associate Professor Dept. of Occupational Therapy, BHPI, CRP- Chapain, Savar, Dhaka- 1343	Signature & Date <i>He may allow to conduct the study as mentioned.</i> <i>[Signature]</i> 20.10.18
Head of the department: SK. Moniruzzaman Assistant Professor & Head Department of Occupational Therapy BHPI, CRP- Chapain, Savar, Dhaka-1343	Signature & Date <i>[Signature]</i> 21.10.2018

Appendix- II: Permission letter for data collection



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

Ref. CRP-BHPI/TRB10/18/1243

Date: 21/11/2018

To
Sujon Ahmed
B.Sc. in Occupational Therapy
Session: 2014-2015, Student ID: 122140145
BHPI, CRP-Savar, Dhaka-1343, Bangladesh

Subject: Approval of research proposal “Return to Work of Stroke Survivors after Taking Rehabilitation Service from Center for the Rehabilitation of the Paralysed” by ethics committee.

Dear Sujon Ahmed,

Congratulations!

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned thesis, with yourself, as the Principal Investigator" The Following documents have been reviewed and approved:

S.N.	Name of Documents
1.	Thesis Proposal
2.	Questionnaire (English and Bangla version)
3.	Information sheet & consent form.

The study involves use of “Factors that influence return to work after stroke” a questionnaire to explore the “Return to Work of Stroke Survivors after Taking Rehabilitation Service from Center for the Rehabilitation of the Paralysed” that may take 40 to 50 minutes and have no likelihood of any harm to the participants. Congenial and secure place of interview will have to be ensured by the investigator. In addition, the investigator will ensure appropriate compensation and/or incentive as per the 40 to 50 minutes from the participants, for example, water, tea, snacks etc without affecting the participant's ability to reasonably decide to participate. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 10 AM on September 01, 2018 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 : 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

Appendix- III: Information Sheet and Consent form (English)

Title: Return to Work of Stroke Survivors after Taking Rehabilitation Service from Center for the Rehabilitation of the Paralysed.

Investigator: Sujon Ahmed, Student of B.Sc. in Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP- Savar, Dhaka- 1343

Supervisor: Md. Julker Nayan, Associate professor, Occupational Therapy Department, Bangladesh Health Professions Institute

Place: The study will be conducted in the community setting (Savar, Dhamrai, Mirpur)

Part I: Information Sheet Introduction

I am Sujon Ahmed, B.Sc. in Occupational Therapy student of Bangladesh Health Professions Institute (BHPI), have to conduct a thesis as a part of this Bachelor course, under thesis supervisor, Julker Nayan. You are going to have details information about the study purpose, data collection process, ethical issues. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research. If this consent form contains some words that you do not understand, please ask me to stop. I will take time to explain.

Background and Purpose of the study

In this study those stroke patients are invited who have received rehabilitation service from Centre for The Rehabilitation of the Paralysed. You are also invited according to this part to participate in this study. It is not possible to know that how many stroke survivors can engaged in their work after taking rehabilitation service. So, this may be one procedure to find out the actual rate of those stroke survivors. The actual purpose of this study is to know that, how many stroke survivors can participate their work after receiving rehabilitation service. We think, it will be helpful to fill-up the purpose of this study by your effective participate. It will make the service more effective & also compare the service with expected outcome.

Research related information

The research related information will be discussed with you throughout the information sheet before taking your signature on consent form. After that participants will be asked to complete a 'Factors that influence return to work after stroke' those may need 40 minutes to fill. If you ensure to participate in this study then you are given a copy of consent form. Next time, a member of this study will go to collect the data from you. According to your preferable time he will collect those data by asking some questions. It is optional to take participation in this study. If you do not agree with this then you have not to participate. You can withdraw your participation at any time from this study without showing any excuse. With regard to your involvement in the research project, or after the decision to withdraw the participation, you will not be affected by your medical condition during the CRP, your relationship with doctors, your relationship with occupational therapists or the relationship with the CRP partner organization. The data collection period will be two months followed by the date of approval. The information recorded is confidential, your name is not being included on the forms, only a number will identify you, and no one else except Julker Nayan, Supervisor of the study will have access to this survey. The survey questionnaire will be distributed and collected by Sujon Ahmed.

Voluntary Participation

The choice that you make will have no effect on your job or on any work-related evaluation or reports. You can change your mind at any time of the data collection process even throughout the study period. You have also right to refuse your participation even if you agreed earlier.

Risks and benefits

We are asking to share some personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not need to answer any question or take part in the discussion interview/survey if you don't wish to do so, and that is also okay. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview. On the other hand, you may not have any direct benefit by participating in this research, but your valuable participation is likely to help us

find out the actual rate of stroke survivor who have engaged in work after taking rehabilitation service. Information about you will not be shared to anyone outside of the research team. The information that we collect from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except Julker Nayan, study supervisor.

Sharing the Results

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you before it is made widely available to the public. Each participant will receive a summary of the results. There will also be small presentation and these will be announced. Following the presentations, we will publish the results so that other interested people may learn from the research.

Who to Contact

If you have any questions, you can ask me now or later. If you wish to ask questions later, you may contact any of the following: Sujon Ahmed, Bachelor science in Occupational Therapy, Department of Occupational Therapy, e-mail: Sujon1.ot18.edu@gmail.com, Cell phone- 01853593995. This proposal has been reviewed and approved by Institutional Review Board (IRB), Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343, Bangladesh, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343, Bangladesh. You also can know about research related information from my research supervisor, Md. Julker Nayan, Cell phone- 01817511404 You can ask me any more questions about any part of the research study, if you wish to. Do you have any questions?

Can you withdraw from this study:

You can cancel any information collected for this research project at any time. After the cancellation, we expect permission from the information whether it can be used or not.

Withdrawal Form

Participants Name:

ID number:

Reason of withdraw:

.....
.....
.....

Participants Signature:

Day/Month/Year:

Part II: Certificate of Consent

Statement by Participants

I have been invited to participate in research title: **Return to Work of Stroke Survivors after Taking Rehabilitation Service from Center for the Rehabilitation of the Paralyzed**. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Name of Participant:

Signature of Participant _____ Date _____

Statement by the researcher taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

1. All information will be used for research.
2. The information will be completely confidential
3. The name and identity of the participant will not be published

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Name of Researcher taking the consent _____

Signature of Researcher taking the consent _____

Date _____

Appendix- IV: Information Sheet and Consent form (Bangla)



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ

সিআরপি- চাপাইন, সাভার, ঢাকা-১৩৪৩. টেলি: ০২-৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্স: ০২-৭৭৪৫০৬

কোড নং:

অংশগ্রহণকারীদের তথ্য এবং সম্মতিপত্র

গবেষনার বিষয়: “পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্র থেকে পুনর্বাসন সেবা গ্রহণের পর স্ট্রোক রোগীদের কাজে প্রত্যাবর্তন”।

গবেষক: সুজন আহমেদ, বি.এস.সি ইন অকুপেশনাল থেরাপি (৪র্থ বর্ষ), সেশন: ২০১৪-২০১৫ ইং, বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই), সাভার, ঢাকা- ১৩৪৩

তত্ত্বাবধায়ক: মো: জুলকার নায়েন, সহযোগী অধ্যাপক, অকুপেশনাল থেরাপি বিভাগ, বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট।

গবেষনার স্থান: সাভার, ধামরাই, মিরপুর এলাকা।

পর্ব ১ তথ্যপত্র

ভূমিকা

আমি সুজন আহমেদ, ঢাকা বিশ্ববিদ্যালয়ে চিকিৎসা অনুষদের অধীনে বাংলাদেশ হেল্থ প্রফেশনস ইনস্টিটিউটে বি.এস.সি.ইন অকুপেশনাল থেরাপি বিভাগে ৪র্থ বর্ষের ছাত্রী হিসেবে স্নাতক শিক্ষাকার্যক্রম (২০১৪-২০১৫ ইং) সেশনে অধ্যয়নরত আছি। বিএইচপিআই থেকে অকুপেশনাল থেরাপি বি.এস.সি শিক্ষাকার্যক্রমটি সম্পন্ন করার জন্য একটি গবেষণা প্রকল্প পরিচালনা করা বাধ্যতামূলক। এই গবেষণা প্রকল্পটি অকুপেশনাল থেরাপি বিভাগের সহযোগী অধ্যাপক মো: জুলকার নায়েন এর তত্ত্বাবধায়নে সম্পন্ন

করা হবে। এই অংশগ্রহনকারী তথ্যপত্রের মাধ্যমে গবেষণার প্রকল্পটির উদ্দেশ্য, উপাত্ত সংগ্রহের প্রণালী ও গবেষণাটির সাথে সংশ্লিষ্ট বিষয় কিভাবে রক্ষিত হবে তা বিস্তারিতভাবে আপনার কাছে উপস্থাপন করা হবে। যদি এই গবেষণায় অংশগ্রহন করতে আপনি ইচ্ছুক থাকেন, সেক্ষেত্রে এই গবেষণার সম্পৃক্ত বিষয় সম্পর্কে স্বচ্ছ ধারণা থাকলে সিদ্ধান্ত গ্রহন সহজতর হবে। অবশ্য এখন আপনার অংশগ্রহন আমাদের নিশ্চিত করতে হবে না। যে কোন সিদ্ধান্ত গ্রহনের পূর্বে, যদি চান তাহলে আপনার আত্মীয়-স্বজন, বন্ধু অথবা আস্থাভাজন যেকারো সাথে এই ব্যাপারে আলোচনা করে নিতে পারেন। অপরপক্ষে, অংশগ্রহনকারী তথ্যপত্রটি পড়ে, যদি কোন বিষয়বস্তু বুঝতে সমস্যা হয় অথবা যদি কোন কিছু সম্পর্কে আরো বেশি জানার প্রয়োজন হয়, তবে নির্দিধায় প্রশ্ন করতে পারেন।

গবেষণার প্রেক্ষাপট ও উদ্দেশ্য

এই গবেষণাতে পক্ষাঘাতগ্রস্থদের পুনর্বাসন কেন্দ্র থেকে যে সকল স্ট্রোক রোগী পুনর্বাসন সেবা নিয়েছেন সে সকল সেবাপ্রাপ্তদের অন্তর্ভুক্ত হবার জন্য আমন্ত্রণ জানানো হবে। এর অংশ হিসাবে, আপনাকেও উক্ত গবেষণা প্রকল্পে অংশগ্রহনের জন্য আমন্ত্রণ জানানো হলো। এটা জানা সম্ভব নয় কতজন স্ট্রোক রোগীর পুনর্বাসন সেবা নেওয়ার পর তাদের কাজে ফিরে গেছে। সুতরাং, স্ট্রোকে বেঁচে থাকা প্রকৃত হার খুঁজে বের করার জন্য এটি একটি পদ্ধতি হতে পারে। গবেষণাটির সাধারণ উদ্দেশ্য হল: কতজন স্ট্রোক রোগী সি.আর.পি থেকে পুনর্বাসন সেবা নেয়ার পর তাদের কাজে প্রত্যাবর্তন করেছেন। আপনার কার্যকারী অংশগ্রহণ গবেষণার উদ্দেশ্য পূরণে সহায়তা করবে বলে আমরা আশাবাদী। এটি চিকিৎসা সেবাকে আরও কার্যকর করে তুলবে এবং প্রত্যাশিত ফলাফলের সাথে চিকিৎসা সেবাটির তুলনা করবে।

এই গবেষণা কর্মটিতে অংশগ্রহনের সাথে সম্পৃক্ত বিষয়সমূহ কি সে সম্পর্কে জানা যাক

আপনার থেকে অনুমতিপত্রে স্বাক্ষর নেবার আগে, এই অংশগ্রহনকারী তথ্যপত্রের মাধ্যমে গবেষণা প্রকল্পটির পরিচালনা করার তথ্যসমূহ বিস্তারিত ভাবে আপনার কাছে উপস্থাপন করা হবে। আপনি যদি এই গবেষণায় অংশগ্রহন করতে চান, তাহলে সম্মতিপত্রে আপনাকে স্বাক্ষর করতে হবে। আপনি অংশগ্রহন নিশ্চিত করলে, আপনার সংরক্ষনের জন্য সম্মতিপত্রটির একটি অনুলিপি দিয়ে দেয়া হবে। পরবর্তীতে গবেষক কর্তৃক গঠিত তথ্য-উপাত্ত সংগ্রহের একটি দলের প্রতিনিধি আপনার কাছে যাবে। আপনার থেকে চেয়ে নেওয়া যে কোন একটি নির্দিষ্ট সময়ে একটি প্রশ্নপত্রের মাধ্যমে তথ্য সংগ্রহ করা হবে। এই গবেষণার প্রকল্পে আপনার

অংশগ্রহণ ঐচ্ছিক। যদি আপনি সম্মতি প্রদান না করেন তবে আপনাকে অংশগ্রহণ করতে হবে না। আপনি সম্মতি প্রদান করা স্বত্বেও যে কোন সময় গবেষককে কোন ব্যাখ্যা প্রদান করা ছাড়াই নিজের অংশগ্রহণ প্রত্যাহার করতে পারবেন। গবেষণা প্রকল্পটিতে অংশগ্রহণ করা কিংবা না করা অথবা পরবর্তীতে অংশগ্রহণ প্রত্যাহার করার সিদ্ধান্তের সাথে আপনার সিআরপিতে অবস্থাকালীন চিকিৎসা, চিকিৎসকদের সাথে সম্পর্ক, অকুপেশনাল থেরাপিস্টদের সাথে আপনার সম্পর্ক অথবা সিআরপির সহযোগী প্রতিষ্ঠানের সাথে সম্পর্ক কোনভাবে প্রভাবিত হবে না।

অংশগ্রহণের সুবিধা ও ঝুঁকিসমূহ কি ?

গবেষণা প্রকল্পটিতে অংশগ্রহণের জন্য আপনি সরাসরি কোন সুবিধা পাবেন না। তবে আমরা আশাবাদী যে, গবেষণার মাধ্যমে প্রাপ্ত উপাত্ত পরবর্তীতে রোগীদের চিকিৎসা কার্যক্রমকে আরো গতিশীল করতে সাহায্য করবে। এখানে সংশ্লিষ্ট গবেষণায় অংশগ্রহণে কোন ধরনের বাড়তি ঝুঁকি, বিপত্তি অথবা অস্বস্তি নেই বলে আশা করা যাচ্ছে।

তথ্যের গোপনীয়তা কি নিশ্চিত থাকবে?

এই সম্মতিপত্রে স্বাক্ষর করার মধ্য দিয়ে, আপনি এই গবেষণা প্রকল্পে অধ্যয়নরত গবেষণা কর্মীকে আপনার ব্যক্তিগত তথ্য সংগ্রহ ও ব্যবহার করার অনুমতি দিয়েছেন। এই গবেষণা প্রকল্পের জন্য সংগৃহীত যেকোন তথ্য, যা আপনাকে সনাক্ত করতে পারে তা গোপনীয় থাকবে। আপনার সম্পর্কে সংগৃহীত তথ্যসমূহ সাংকেতিক উপায়ে উল্লেখ থাকবে। শুধুমাত্র এর সাথে সরাসরি সংশ্লিষ্ট গবেষক ও তার তত্ত্বাবধায়ক এই তথ্যসমূহে প্রবেশাধিকার পাবেন। সাংকেতিক উপায়ে চিহ্নিত উপাত্ত সমূহ পরবর্তী উপাত্ত বিশ্লেষণের কাজে ব্যবহৃত হবে। তথ্যপত্রগুলো তালাবদ্ধ ড্রয়ারে রাখা হবে। বিএইচপিআই এর অকুপেশনাল থেরাপি বিভাগে ও গবেষকের ব্যক্তিগত ল্যাপটপে উপাত্তসমূহের ইলেকট্রনিক ভার্সন সংগৃহীত থাকবে।

প্রত্যাশা করা হচ্ছে যে, এই গবেষণা প্রকল্পের ফলাফল বিভিন্ন ফোরামে প্রকাশিত এবং উপস্থাপিত হবে। যে কোন ধরনের প্রকাশনা ও উপস্থাপনার ক্ষেত্রে তথ্যসমূহ এমন ভাবে সরবরাহ করা হবে, যেন আপনার সম্মতি ছাড়া আপনাকে কোন ভাবেই সনাক্ত করা না যায়। তথ্য-উপাত্ত প্রাথমিক ভাবে কাগজপত্র সংগ্রহ করা হবে।

গবেষণা সম্পর্কে জানতে কোথায় যোগাযোগ করতে হবে?

গবেষণা প্রকল্পটির বিষয়ে যোগাযোগ করতে চাইলে অথবা গবেষণা প্রকল্পটির সম্পর্কে কোন প্রশ্ন থাকলে, এখন অথবা পরবর্তীতে যে কোন সময়ে তা জিজ্ঞাসা করা যাবে। এই গবেষণা প্রকল্পটি বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট, সাভারের প্রাতিষ্ঠানিক নৈতিকতা পরিষদ থেকে পর্যালোচিত ও অনুমোদিত হয়েছে। এই গবেষণা প্রকল্প পরিচালনা প্রসঙ্গে যেকোন উদ্ভিন্ন অথবা অভিযোগকারী ব্যক্তি প্রাতিষ্ঠানিক নৈতিকতা পরিষদের সাথে এই নাম্বারে (৭৭৪৫৪৬৪-৫) যোগাযোগ করতে পারবেন। এছাড়াও আপনি গবেষক এবং গবেষণার তত্ত্বাবধায়কের সাথে যোগাযোগ করতে পারেন।

গবেষক: সুজন আহমেদ, ফোন নং: ০১৮৫৩৫৯৩৯৯৫

ই-মেইল: sujon1.ot18.edu@gmail.com

তত্ত্বাবধায়ক: মো: জুলকার নায়েন, ফোন নং: ০১৮১৭৫১১৪০৪

গবেষণা থেকে নিজেকে প্রত্যাহার করা যাবে কি?

আপনি সম্মতি প্রদান করা স্বত্বেও যে কোন সময় গবেষককে কোন ব্যাখ্যা প্রদান করা ছাড়াই নিজের অংশগ্রহণ প্রত্যাহার করতে পারবেন। বাতিল করার পর তথ্যসমূহ কি ব্যবহার করা যাবে কি যাবেনা তার অনুমতি অংশগ্রহণকারীর প্রত্যাহারপত্রে (শুধুমাত্র স্বেচ্ছায় প্রত্যাহারকারীর জন্য প্রযোজ্য) উল্লেখ করা থাকবে।

অংশগ্রহণকারীর প্রত্যাহার পত্র

(শুধুমাত্র স্বেচ্ছায় প্রত্যাহারকারীর জন্য প্রযোজ্য)

অংশগ্রহণকারীর নাম:

প্রত্যাহার করার কারণ:

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পূর্ববর্তী তথ্য ব্যবহারের অনুমতি থাকবে কিনা?

হ্যাঁ/না

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর স্বাক্ষর:

তারিখ:

নিরক্ষর যদি হয়:

অংশগ্রহণকারীর আঙুলের ছাপ

সাক্ষীর নাম:

সাক্ষীর স্বাক্ষর:

পর্ব: ০২ সম্মতি পত্র

“পক্ষাঘাতগ্রস্থদের পুনর্বাসন কেন্দ্র থেকে পুনর্বাসন সেবা গ্রহনের পর স্ট্রোক রোগীদের কাজে প্রত্যাবর্তন” - শীর্ষক গবেষণায় অংশগ্রহনের জন্য আমাকে আমন্ত্রন জানানো হয়েছে। আমি পূর্বলিখিত তথ্য পত্রটি পড়েছি বা এটা আমাকে পড়ে শোনানো হয়েছে। এই বিষয়ে আমার প্রশ্ন জিজ্ঞাসা করার সুযোগ ছিল এবং যে কোন প্রশ্নের আমি সন্তুষ্টজনক উত্তর পেয়েছি। এই গবেষণায় একজন অংশগ্রহনকারী হবার জন্য আমি স্বেচ্ছায় সম্মতি দিচ্ছি।

অংশগ্রহনকারীর নাম:

অংশগ্রহনকারীর স্বাক্ষর:

তারিখ:

নিরক্ষর যদি হয়:

অংশগ্রহনকারীর আঙুলের ছাপ

সাক্ষীর নাম:

সাক্ষীর স্বাক্ষর:

গবেষক ও সম্মতিকারীর বিবৃতি:

আমি অংশগ্রহনকারীকে অংশগ্রহনকারীর তথ্যপত্রটি পড়ে শুনিয়েছি এবং আমার সর্বোচ্চ সামর্থ অনুযায়ী নিশ্চিত করেছি যে, অংশগ্রহনকারীর বোধগম্য হয়েছে যে, নিম্নোক্ত বিষয়সমূহ করা হবে।

- ১) সকল তথ্য গবেষণার কাজে ব্যবহৃত হবে।
- ২) তথ্যসমূহ সম্পূর্ণভাবে গোপনীয় করা হবে।
- ৩) অংশগ্রহনকারীর নাম ও পরিচয় প্রকাশ করা হবে না।

আমি নিশ্চিত করেছি যে, এই বিষয় সম্পর্কে অংশগ্রহনকারীকে প্রশ্ন জিজ্ঞাসা করার সুযোগ দেয়া হয়েছে এবং অংশগ্রহনকারী যে সকল প্রশ্ন জিজ্ঞাসা আমার সর্বোচ্চ সামর্থ অনুযায়ী, সেগুলোর সঠিক উত্তর প্রদান করা সম্ভব হয়েছে। আমি নিশ্চিত করেছি যে, কোন ব্যক্তিকে সম্মতি দান করতে বাধ্য করা হয়নি। তিনি অবাধে অথবা স্বেচ্ছায় সম্মতি দিয়েছেন।

অংশগ্রহনকারীকে অংশগ্রহনকারীর তথ্য ও সম্মতিপত্রের একটি অনুলিপি দেওয়া হয়েছে।

গবেষকের নাম:

গবেষকের স্বাক্ষর :

তারিখ:

Appendix- V: Questionnaire in English

Factors That Influence Return to Work After Stroke

Questionnaire

SECTION A: DEMOGRAPHIC AND MEDICAL DETAILS

- 1) Participants number:
- 2) Age:
- 3) Gender: Male Female
- 4) Marital status: Not Married Married Divorced
Widowed Separated
- 5) How far did you go with your education?
Graduated Higher Secondary Secondary
Primary Illiterate Others
- 6) Side of hemiplegia (weakness): Right Left Both
- 7) Duration of stroke:
- 8) Type of stroke: Ischemic Hemorrhagic
- 9) Duration of rehabilitation service:
- 10) Have you had a previous stroke? Yes No
If yes, when?
- 11) Do you have any other medical conditions? Yes No
If yes, mark on it.
I) Hypertension II) Diabetes III) Epilepsy IV) Headaches
V) Fatigue VI) Depression VII) Arthritis VIII) Others

SECTION B: FINANCIAL AND EMPLOYMENT HISTORY

12) What is your present monthly personal income?

- 5000 tk or less 6000-15000tk 16000-25000tk
26000-35000tk 36000-45000tk More than 45000tk

13) Are you currently working? Yes No

If you answered YES, when did you return back to work?

.....

If you answered NO, do you have any other form of income generating Activity? Yes No

If you answered yes, what do you do to generate an income or money?

.....

Before your stroke, were you the main source of income for your family?

- Yes No If no, why?

.....

If Yes, are you still the main source of income for your family?

- Yes No

If no, where is this income coming from?

15) Prior to your stroke, did you work:

- In the formal employment sector as a permanent/ part-time employee or business owner or
- Did you work as a casual laborer or
- Did you generate your own income through outside of the formal employment sector

.....

.....

16) Where yourself-employed (formal or informal) or employed by others before the stroke?

Self-employed Employed by others

17) What work did you do to earn money before you had your stroke?

.....
.....
.....

18) If you were formally employed by a company or a person at the time of your stroke, did you receive sick leave?

Yes No

If yes, for how long

.....

If yes, were you paid Yes No

19) Are you currently receiving any disability benefit? (private or governmental)

Yes No

If yes, please specify.....

[Only ask questions 20-23 if the person has returned to work then proceed to section C; If they are not working ask from question 24. If they answered yes, complete the section and proceed to section D. If they answered no, at 24, stop asking question on this page and proceed to section E.]

20) If you are working, then did you return to your previous paying job or income generating activity? Yes No

If you answered YES;

a) Has what you were doing before the stroke now changed after the stroke? Yes No

b) Were there any changes to the buildings (inside or outside) to accommodate your needs? Yes No

21) If you returned to work, then are you working full day or half-day or shifts?

Full day Half day Shift work

22) How many days in a week are you working?

23) Are you happy in your current job? Yes No

Why?

24) If you are currently not working, had you previously returned to work

after your stroke? Yes No

If you answered YES, please answer below.

a) How long after your stroke did you return to work?

b) How long did you work before stopping?.....

c) Did you return to your previous job? Yes No

If you answered NO, please specify change of job and why?

.....

.....

d) If you initially returned to your previous job then, were your job duties changed at all? Yes No

e) Was your physical work environment changed to accommodate you? (whether it was the previous employment or new employment)

Yes No

If you answered YES, was it suitable?

Yes No

f) Were you working full day or half day or shift?

Full day Half day Shift

g) How many days in a week were you working?

h) Did you enjoy your most recent job?

Yes No Why?.....

SECTION C: INFLUENCING FACTORS FOR RETURNING TO WORK

(Only complete if the participant returned to work.)

25) What were your reasons for returning to work? You may give as many reasons as you can think of. *(Data collector should record all reasons mentioned)*

.....

.....

.....

.....

.....

.....
.....
.....

26) Of all the reasons you listed above, which are the main three reasons why you chose to go back to work in order of importance?

- i.
- ii.
- iii.

SECTION D: INFLUENCING FACTORS FOR STOPPING WORK

(Only complete if the participant returned to work and then stopped.)

27) Please list the reasons that caused you to stop working. You may give as many reasons as you can think of. *(Data collector should only record those mentioned)*

.....
.....
.....
.....
.....
.....
.....
.....
.....

28) Of all reasons you listed above, which are the main three reasons that contributed most to your stopping work following your stroke? Please list in order of importance.

- i.
- ii.
- iii.

SECTION E: INFLUENCING FACTORS FOR NOT RETURNING TO WORK

(Only complete if the participant never returned to work.)

29) Please list the factors below that caused you to stop working. You may give as many reasons as you can think of. *(Data collector should only record those mentioned)*

.....
.....
.....
.....
.....
.....
.....
.....
.....

30) Of all the reasons you listed above, which are the main three reasons contributed most to you not returning to work after your stroke? Please list in order of importance.

i.
ii.
iii.

APPENDIX: FACTOR LIST FOR SECTIONS C, D, E

a) Body Functions factors

- Poor memory
- Poor concentration
- Difficulty with thinking skills (higher order cognition)
- Difficulty with vision
- Difficulty with hearing
- Difficulty with finding words (Expressive aphasia)
- Difficulty understanding others (Receptive problems)
- Difficulty with speech and speech clarity
- Poor use of affected arm (writing, carrying, etc.)
- Poor use of affected leg
- Difficulty with going to the toilet or incontinence
- Other medical related conditions
- Pain

b) Psychosocial factors

- Demotivated/ No desire
- Boredom
- Depressed
- Anxiety / Fear of returning to work
- Fear of superiors/colleagues/subordinates' perceptions
- Previous job-related stresses

c) Activity and participation factors

- Difficulty getting ready for work on time
- Difficulty getting to work on time
- Tire easily during the day

- Difficulty with reading/writing /basic calculations
- Difficulty with doing simple tasks required in the job
- Difficulty doing complex tasks required in the job
- Difficulty with completing all tasks required of me in time
- Difficulty using the tools/machinery needed for my job
- Difficulty with meeting my job requirements
- Difficulty moving around my work environment effectively
- Difficulty with the physical demands of the job
- Difficulty with forming and maintaining formal relationships with superiors, colleagues and/or subordinates
- Unable to be accommodated in the work place
- No suitable position available in the work place
- Previous employer would not rehire

d) Economic factors

- Financially unnecessary (self-sufficient)
- Receiving a government disability grant
- Receiving a disability benefit payment
- Taken early pension
- Medically boarded
- Still on paid sick leave
- Still on temporary incapacity leave

e) Environmental Factors

- Inability to access transport
- Poor access to assistive devices for mobility
- Poor access to assistive devices for communication
- Outdoor work environment has poor physical accessibility
- Indoor work environment has poor physical accessibility

- Attitudes of superiors in the work environment
- Attitudes of colleagues in the work environment
- Attitudes of subordinates in the work environment
- Did not know about employment and disability policies

f) Other

- Did not know that you could return to work
- Do not know your rights as a disabled person and your rights with regards to return to work.

SECTION F: MODIFIED RANKING SCALE (Wilson et al., 2002)

The interviewer is to select the most appropriate description.

	Scale	Description	Questions
✓	0	No symptoms at all; no limitations and no symptoms.	
	1	No significant disability; symptoms present but no other limitations.	As a result of the stroke, does the participant have difficulty with: <ul style="list-style-type: none"> • Reading & writing • Speaking or finding the right word • Balance & coordination • Visual problems • Numbness (face, arm, hands, leg, feet) • Swallowing • Other
	2	Slight disability; limitations in participation in usual social roles, but independent for ADL.	As a result of the stroke has there been a change in the person’s ability to: <ul style="list-style-type: none"> • Work or look after others • Participate in previous social and leisure activities • Has the participants had problems with relationships and/or has become isolated since the stroke?
	3	Moderate disability; need for assistance with some instrumental ADL but not basic ADL.	As a result of the stroke, is assistance essential for preparing a simple meal, doing household chores, looking after money, shopping, or travelling locally?
	4	Moderately severe disability; need for assistance with some basic ADL, but not requiring constant care.	As a result of the stroke, is assistance essential for eating, using the toilet, daily hygiene or walking?
	5	Severe disability; someone needs to be available at all times; care may be provided by either a trained or an untrained caregiver.	As a result of the stroke, does the person require constant care?

বিভাগ বিঃ আর্থিক এবং কর্মসংস্থান সংক্রান্ত বিবরণ

১২। বর্তমানে আপনার ব্যক্তিগত মাসিক আয় কত ?

৫০০০ট এর কম

৬০০০-১৫০০০ট

১৬০০০-২৫০০০ট

২৬০০০-৩৫০০০ট

৩৬০০০-৪৫০০০ট

৪৫০০০ট এর উপরে

১৩। আপনি কি বর্তমানে কাজ করছেন ?

হ্যাঁ না

যদি আপনার উত্তর হ্যাঁ হয়, আপনি কখন কাজে প্রত্যাবর্তন করেছিলেন ?

.....

যদি আপনার উত্তর না হয়, আপনার অন্য কোন আয় উৎপাদন মূলক কার্যক্রম রয়েছে কিনা ?

হ্যাঁ না

যদি আপনি হ্যাঁ উত্তর দেন, আপনি আয় অথবা অর্থ উপার্জনের জন্য কি করেন ?

.....

১৪। স্ট্রোকের পূর্বে, আপনি কি আপনার পরিবারের আয়ের প্রধান উৎস ছিলেন?

হ্যাঁ না

যদি না হয়, কেন?

.....

ক। যদি হ্যাঁ হয়, আপনি কি এখনো আপনার পরিবারের প্রধান আয়ের উৎস ?

হ্যাঁ না

যদি না হয়, এই আয় কোথায় থেকে আসছে ?

.....

১৫। স্ট্রোকের পূর্বে, আপনি কাজ করতেনঃ

আনুষ্ঠানিক কর্মসংস্থান খাতের একটি স্থায়ী/পার্ট টাইম কর্মচারী বা ব্যবসার মালিক হিসেবে অথবা

দিনমজুর হিসেবে কাজ করতেন অথবা

আনুষ্ঠানিক কর্মসংস্থান খাতের বাইরে আপনার নিজের আয় উৎপন্ন করতেন

১৬। আপনি স্ট্রোকের পূর্বে, স্ব নিযুক্ত (ফরমাল অথবা ইনফরমাল) অথবা অন্যের দ্বারা নিযুক্ত ছিলেন ?

স্ব নিযুক্ত অন্যের দ্বারা নিযুক্ত ছিলেন

১৭। স্ট্রোকের পূর্বে অর্থ উপার্জনের জন্য আপনি কি কাজ করতেন?

.....
.....
.....

১৮। আপনার স্ট্রোকের সময়, যখন ব্যক্তি দ্বারা বা কোন সংস্থার কাজে নিযুক্ত ছিলেন তখন অসুস্থতার জন্য কি ছুটি পেয়েছেন?

হ্যাঁ না

যদি হ্যাঁ হয়, কত দিনের জন্য?.....

যদি হ্যাঁ হয়, আপনাকে কি এর জন্য অর্থ প্রদান করা হয়েছিল ?

হ্যাঁ না

১৯। বর্তমানে আপনি কি কোন প্রতিবন্ধী সুবিধা গ্রহণ করেছেন ?(ব্যক্তিগত অথবা সরকারি)

হ্যাঁ না

যদি হ্যাঁ হয়, দয়া করে নির্ধারণ করুন,.....

[শুধু মাত্র ২০ থেকে ২৩ নং প্রশ্নগুলো করুন, যদি ব্যক্তিটি কাজে ফিরে থাকেন তারপর বিভাগ 'সি' তে যান। যদি তারা কাজ না করে ২৪ নাম্বার প্রশ্ন থেকে জিজ্ঞাসা করুন। যদি তারা 'হ্যাঁ' উত্তর দেয় বিভাগটি সম্পূর্ণ করুন এবং বিভাগ 'ডি' তে যান। যদি ২৪ নাম্বারে তাদের উত্তর 'না' হয় ঐ পৃষ্ঠায় প্রশ্ন করা বন্ধ করে দিন এবং বিভাগ 'ই' তে এগিয়ে যান।]

২০। যদি আপনি কাজ করতে থাকেন, আপনি কি আপনার আগের চাকরিতে বা আয় উৎপাদন মূলক কাজে ফিরে গিয়েছিলেন ?

হ্যাঁ না

যদি আপনার উত্তর হ্যাঁ হয়;

ক। স্ট্রোকের পূর্বে আপনি যে কাজ করছিলেন, স্ট্রোকের পর এখন কি কোন পরিবর্তন হয়েছে ?

হ্যাঁ না

খ। আপনার প্রয়োজন মেটানোর জন্য ভবনগুলোতে (ভিতরে বা বাইরে) কোনো পরিবর্তন করা হয়েছিল কি ?

হ্যাঁ না

২১। যদি আপনি কাজে ফিরে থাকেন, তাহলে আপনি কি পুরো দিন বা অর্ধেক দিন বা শিফটে কাজ করছেন ?

পুরো দিন অর্ধেক দিন শিফটে

২২। আপনি সপ্তাহে কত দিন কাজ করছেন ?.....

২৩। আপনার বর্তমান কাজে আপনি কি খুশি ?

হ্যাঁ না

কেন ?.....

২৪। বর্তমানে আপনি যদি কাজ না করে থাকেন, আপনার স্ট্রাকের পর আপনি কি কাজে প্রত্যাবর্তন করেছিলেন ?

হ্যাঁ না

যদি আপনার উত্তর হ্যাঁ হয়, দয়া করে নিচের উত্তর দিন।

ক। আপনার স্ট্রাকের কত সময় পরে আপনি কাজে প্রত্যাবর্তন করেছিলেন ?

খ। বন্ধ হওয়ার আগে আপনি কত সময় কাজ করেছিলেন ?

গ। আপনি কি আপনার পূর্ববর্তী চাকরিতে প্রত্যাবর্তন করেছিলেন ?

হ্যাঁ না

যদি আপনার উত্তর না হয়, দয়া করে কাজের পরিবর্তন উল্লেখ করুন এবং কেন ?

.....

ঘ। যখন আপনি প্রাথমিকভাবে আপনার আগের কাজে প্রত্যাবর্তন করেছিলেন তখন কি আপনার কাজের দায়িত্বগুলো আদৌ পরিবর্তিত হয়েছিল ?

হ্যাঁ না

ঙ। আপনাকে মানিয়ে নেয়ার জন্য আপনার কায়িক শ্রমের পরিবেশের কোনো পরিবর্তন করা হয়েছিল কি ?

(আগের কর্মসংস্থান বা বর্তমান কর্মসংস্থান)

হ্যাঁ না

যদি আপনার উত্তর হ্যাঁ হয়, এটা কি উপযুক্ত ছিল ?

হ্যাঁ না

চ। আপনি কি পুরো দিন বা অর্ধেক দিন বা শিফটে কাজ করেছিলেন ?

পুরো দিন অর্ধেক দিন শিফটে

ছ। আপনি সপ্তাহে কতদিন কাজ করেছিলেন ?

জ। আপনার অতি সাম্প্রতিক কাজটি কি আপনি উপভোগ করতেন ?.....

হ্যাঁ না কেন ?.....

বিভাগ সিঃ কাজে প্রত্যাবর্তনের জন্য প্রভাব বিস্তারকারী বিষয়সমূহ

(শুধুমাত্র সম্পূর্ণ করুন যদি অংশগ্রহণকারী কাজে প্রত্যাবর্তন করে থাকেন)

২৫। কাজে প্রত্যাবর্তনের কারণগুলো কি ছিল, আপনার চিন্তা অনুযায়ী আপনি অনেকগুলো কারণ দিতে পারেন (তথ্য সংগ্রাহকের উচিত উল্লিখিত সব কারণ রেকর্ড করা)

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২৬। উপর্যুক্ত সব কারণ থেকে গুরুত্বের দিক থেকে প্রধান তিনটি কারণ কোনগুলো, যে কারণে আপনি কাজে প্রত্যাবর্তন বেছে নিয়েছেন ?

I.....

II.....

III.....

বিভাগ ডিঃ কাজ বন্ধ করার ক্ষেত্রে বিস্তারকারী বিষয়সমূহ

(শুধুমাত্র সম্পূর্ণ করুন, যদি অংশগ্রহণকারী কাজে প্রত্যাবর্তন করে থাকেন এবং তারপর বন্ধ করে দেন)

২৭। যে কারণে আপনি কাজ বন্ধ করেছেন, দয়া করে সেই কারণগুলো তালিকা করুন। আপনার চিন্তা অনুযায়ী আপনি অনেক কারণ দিতে পারেন (তথ্য সংগ্রাহকের উচিত উল্লিখিত কারণগুলো রেকর্ড করা)

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২৮। উপর্যুক্ত কারণগুলোর মধ্যে কোন তিনটি কারণ আপনার কাজ বন্ধ করে দিতে সবচেয়ে বেশি দায়ী। দয়াকরে, গুরুত্ব অনুযায়ী তালিকা করুন।

- I.....
- II.....
- III.....

বিভাগ ইঃ কাজে না ফিরে যাবার ক্ষেত্রে প্রভাবিত বিষয়গুলো

(সম্পূর্ণ করুন, যদি অংশগ্রহণকারী কখনোই কাজে প্রত্যাবর্তন না করে থাকেন)

২৯। আপনার কাজ বন্ধের জন্য যে বিষয়গুলো দায়ী, দয়াকরে সে কারণগুলো নিচে তালিকাভুক্ত করুন। আপনার চিন্তা অনুযায়ী অনেকগুলো কারণ দিতে পারেন।(তথ্য সংগ্রাহকের উচিত উল্লেখিত কারণগুলো রেকর্ড করা)

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৩০। উপর্যুক্ত কারণগুলোর মধ্যে কোন তিনটি কারণ স্ট্রাকচার পর আপনাকে কাজে পত্যাবর্তন না করার ক্ষেত্রে সবচেয়ে বেশি দায়ী। দয়া করে গুরুত্বের দিক বিবেচনা করে তালিকা করুন।

- I.....
- II.....
- III.....

অতিরিক্ত ভাবে সংযুক্ত অংশঃ সি, ডি, ই, বিভাগের বিষয় গুলোর তালিকা

ক। শারীরিক বৃত্তীয় কার্যাবলিঃ -

- দুর্বল স্মৃতিশক্তি
- দুর্বল মনোযোগ
- চিন্তা করার দক্ষতায় অসুবিধা
- দেখায় অসুবিধা
- শ্রবনে অসুবিধা
- শব্দ খুঁজে বের করায় অসুবিধা (এক্সপ্রেসিব এফাশিয়া)
- অন্যদের বুঝতে পারার অসুবিধা হওয়া (রিসেপটিভ এফাশিয়া)
- কথা এবং স্পষ্ট কথাবার্তায় অসুবিধা
- আক্রান্ত হাতের কম ব্যবহার
- আক্রান্ত পায়ের কম ব্যবহার
- টয়লেটে যেতে অসুবিধা হওয়া
- অন্যান্য চিকিৎসা সংক্রান্ত সমস্যা
- ব্যথা

খ। মনো সামাজিক বিষয়গুলোঃ-

- অনুৎসাহিত/ইচ্ছা না থাকা
- একঘেয়েমি
- বিষন্নতা
- উদ্বেগ/কাজে ফেরার ক্ষেত্রে ভয়
- উর্ধ্বস্ত/সহকর্মী/অধীনস্থদের চিন্তা সংক্রান্ত ভয়
- পূর্বের চাকরি সংক্রান্ত বিষন্নতা

গ। কাজকর্ম এবং অংশগ্রহণের বিষয়গুলোঃ-

- নির্দিষ্ট সময়ে কাজে অংশগ্রহণ করতে সমস্যা
- নির্দিষ্ট সময়ে কাজের জন্য প্রস্তুত হওয়ার অসুবিধা
- দিনের বেলা সহজেই ক্লান্ত হয়ে পড়া
- লেখা/পড়ায় বেসিক হিসাব গুলোতে অসুবিধা হওয়া

- কর্মক্ষেত্রের সহজ এবং প্রয়োজনীয় কাজগুলো সম্পাদন করায় অসুবিধা
- কর্মক্ষেত্রের জটিল এবং প্রয়োজনীয় কাজগুলো সম্পন্ন করায় অসুবিধা, সকল প্রয়োজনীয় কাজ সম্পন্ন করতে অসুবিধা হওয়া
- কর্মক্ষেত্রের ব্যবহৃত জিনিসপত্র অথবা যন্ত্রপাতি ব্যবহারে অসুবিধা হওয়া
- কাজের দরকারে মিটিং করতে অসুবিধা হওয়া
- কার্যকরভাবে কর্মপরিবেশ চালিয়ে যাওয়ায় অসুবিধা হওয়া
- কাজের শারীরিক চাহিদায় অসুবিধা হওয়া
- উর্ধ্বস্থ/সহকর্মী/অধীনস্থদের সাথে বাহ্যিক ফর্মাল সম্পর্ক গঠন এবং পরিচালনা করায় অসুবিধা হওয়া
- কর্মস্থলের জায়গা সংকুলান না হওয়া
- কর্মস্থলে উপযুক্ত পদ সুলভ না হওয়া
- পুরাতন কর্মজীবীদের পুনরায় ভাড়া না করা

ঘাঅর্থনৈতিক বিষয়গুলোঃ-

- আর্থিকভাবে অপ্রয়োজনীয় (নিজে স্বচ্ছল)
- সরকারি প্রতিবন্ধী অনুদান গ্রহণ করা
- প্রতিবন্ধী ভাতা গ্রহণ করা
- খুব আগেই পেনশন নিয়ে নেওয়া
- মেডিকেলি বোর্ডেড
- এখনো অসুস্থতার ছুটিতে বেতন পাওয়া
- এখনও অস্থায়ী ছুটিতে থাকা

ঙ। পরিবেশগত বিষয়গুলোঃ-

- পরিবহন ব্যবস্থায় সমস্যা
- স্থানান্তরের জন্য যেসব সাহায্যকারী যন্ত্র ব্যবহার করা হয় সেই গুলোর অপরিপূর্ণতা
- যোগাযোগ করতে যেসব সাহায্যকারী যন্ত্র ব্যবহার করা হয় তার অপরিপূর্ণতা
- বাহিরের পরিবেশের শারীরিক প্রবেশগম্যতার অনুপযুক্ততা
- ভেতরের কাজের পরিবেশে শারীরিকভাবে প্রবেশগম্যতার দুর্বলতা
- কর্মপরিবেশের উর্ধ্বতন কর্মকর্তাদের মনোভাব
- কর্মপরিবেশের সহকর্মীদের মনোভাব

- কর্মপরিবেশের অধীনস্থদের মনোভাব
- চাকরি এবং প্রতিবন্ধী নীতি সম্পর্কে অজ্ঞাত

চাঅন্যান্যঃ-


- আপনি কাজে প্রত্যাবর্তন করতে পারবেন, এটা না জানতে পারা
- একজন প্রতিবন্ধী ব্যক্তি হিসেবে আপনার অধিকার এবং কাজে প্রত্যাবর্তনের সুবিধার ক্ষেত্রে আপনি অবগত নন

বিভাগ এফঃ মডিফাইড রেফ্রিং স্কেল

❖ সাক্ষাৎকার সবচেয়ে উপযুক্ত বিবরণটি নির্বাচন করবেন

✓	স্কেল	বর্ণনা	প্রশ্ন
	০	কোন লক্ষণ নাই; কোন উপসর্গ এবং কোন সীমাবদ্ধতা নাই।	
	১	উল্লেখযোগ্য কোনো অক্ষমতা নেই; উপসর্গ থাকবে কিন্তু কোন সীমাবদ্ধতা থাকবে না।	স্ট্রোকের ফলে যে যে কাজে অংশগ্রহণে অসুবিধা থাকবেঃ- <ul style="list-style-type: none"> ● পড়া এবং লেখা ● কথা বলতে বা সঠিক শব্দ খুঁজতে ● ভারসাম্য এবং সমন্বয় ● দেখতে সমস্যা ● অসাড় অবস্থা (মুখের, বাহুর, হাতে পায়ের, পায়ের পাতা, খাবার গিলতে সমস্যা) ● অন্যান্য
	২	সামান্য অক্ষমতা; স্বাভাবিক নিয়মে অংশগ্রহণে সীমাবদ্ধতা কিন্তু দৈনন্দিন কাজে স্বাধীন।	স্ট্রোকের ফলে একজন ব্যক্তির কার্য ক্ষমতার কতটুকু পরিবর্তন হয়েছেঃ- <ul style="list-style-type: none"> ● কাজ বা অন্যদের যত্নে ● পূর্ববর্তী, সামাজিক এবং অবসর মূলক কার্যক্রমে অংশগ্রহণে। ● অংশগ্রহণকারীর আত্মীয়দের সাথে সমস্যা ছিল? অথবা তা বিচ্ছিন্ন হয়ে গেছে কি?
	৩	একটু বেশি অক্ষমতা; দৈনন্দিন কাজের জন্য সহায়ক উপকরণ প্রয়োজন, যেটা মৌলিক নয়।	স্ট্রোকের কারণে খাবার তৈরী, ঘরের কাজ করা, কেনাকাটা করা অথবা স্থানীয় গমনের ক্ষেত্রে সাহায্যের দরকার হয় কি?
	৪	মঝারি গুরুতর অক্ষমতা; কিছু মৌলিক দৈনন্দিন কাজে সাহায্যের দরকার হয় কিন্তু এটা কনস্টান্ট না।	স্ট্রোকের ফলে, খাওয়া-দাওয়া, টয়লেট ব্যবহার, পরিষ্কার হওয়া অথবা হাটা চলার সাহায্যের দরকার হয় কি?
	৫	গুরুতর অক্ষমতা; সবসময় একজন দেখাশুনাকারির প্রয়োজন হয়। প্রশিক্ষন বা অপ্রশিক্ষন ব্যক্তি দ্বারাও সেবা নেওয়া যেতে পারে।	স্ট্রোকের ফলে ব্যক্তির সার্বক্ষনিক সেবার প্রয়োজন।

Appendix- VII: Permission letter from author for using Questionnaire

 **Stacey Patterson** Sep 25, 2018, 8:20 PM (4 days ago) ☆ ↶ ⋮

to me ▾

Good Day Sujon

Thank you for reading my research and showing interest.

I am very glad that you are extending the global body of research into RTW for stroke survivors. My questionnaire that I used was created by myself with assistance with my research supervisor. I did find some components useful but others did not give me the information that I required.

I give my permission for you to use the research questionnaire, but would advise to re-develop it and tailor it to your setting.

I can re-look at my questionnaire and highlight the areas that I found useful and those that I did not.

The best information that I gathered was through qualitative component of the research and gathering information from the experiences of stroke survivors themselves.

I hope that this helps.

Kind regards,
Stacey Patterson

From: [sujon ahmed](#)
Sent: Tuesday, 25 September 2018 8:44 AM
To: stacey.l.patterson@gmail.com
Subject: Permission to use Questionnaire

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