

EXPERIENCE OF FEMALE STROKE PATIENT ABOUT SEXUALITY



By

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Abstract

Background: Stroke is one of the major causes of disability throughout the world in every year. Following stroke a person's sexuality hampered significantly. On the other hand the problem is to take part in sexuality affects the entire quality of life of the stroke survivors. This study was focused to know the experience of female stroke patient about their sexuality.

Objectives of the study: Objectives of this study were to understand the problems of sexual relationship of female stroke patient that they faced after having stroke, to understand the perception of female stroke patient about sexuality, and to understand how do they maintain their sexual life after stroke.

Methodology: This study was conducted by using qualitative content analysis approach of qualitative method. Purposive sampling was used for selecting Participants. Data was collected by using face to face interview with a semi-structured question. Data was analyzed by using content analysis.

Result and Discussion: After analyzing data, it was found that female stroke patients are knowledgeable about sexuality. Their paralysed limb affects their sexual relationship and as a result of disrupted sexual relationship they feel sad to do activities of daily living (ADLs). Physical support is required from partner to maintain their sexual relationship but female stroke patients do not discuss with their husband regarding their difficulties to take part in sexual activities.

Conclusion: Stroke affects all aspects of life both patient and their family physically, psychologically, socially and economically. Like other activity sexuality is very important aspect for stroke patient. Stroke patient face different problem to form sexual relationship with partners. So it is necessary to include sexuality in Occupational Therapy treatment session as sexuality is a part of activities of daily living.

Key words: *Stroke, Sexuality, Occupational Therapy.*

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List of Abbreviations

OT	: Occupational Therapy
ADLs	: Activities of Daily Living
AOTA	: American Occupational Therapy Association
CRP	: Centre for the Rehabilitation of the Paralysed
QCA	: Qualitative Content Analysis
WHO	: World Health Organization

CHAPTER 1 INTRODUCTION

Stroke is one of the main causes of death and disability around the world. Stroke is a life threatening condition which leads to considerable changes in all aspects of the life of an individual. It is necessary to adapt a patient with stroke to different physical, social and emotional problems in their life.

Following a stroke, different sexual problems are seen both male and female like vaginal lubrication, orgasm, decline in erection and ejaculation. These problems are seemed to be liable for impaired sexual satisfaction of the stroke patient. Along with physical disabilities, stroke patient might have many discomforts in their sexual life including fear of a new stroke, loss of self-esteem, role changes in spousal relationship (Tamam *et al.* 2008).

Thompson and Ryan (2009) argued intimate relationship and sexuality are important factors that consider quality of life of the stroke patient. In post stroke spousal relationship, sexual desire and sexual functioning changed significantly. There is a lack of control and remarkable changes in the perception of self of stroke survivors.

Though stroke patients think that sexuality is a vital part of their life as well as important part of rehabilitation process, they and their partners face discomfort talking about sex matters with their health care providers. This is because of their discomfort, modesty and shame (Schmitz and Finkelstein, 2010).

Above all, it has seen that stroke patient face various sexual problems after stroke. As anyone, it is needed to a female stroke patient to adjust their sexual life that depends on the optimal care. If therapists do not deal this issue accurately it affects on a therapist's competency to deal with different kinds of disabilities. Because an occupational therapist can work closely in terms of Activities of Daily Living (ADLs) of a patient and make them independent as much as possible. During rehabilitation program, an occupational therapist has a role for supporting a person with stroke to adjust and adapt with sexuality. So in order to ensure better rehabilitation services to female stroke patient, it is an important issue for conducting this research. This study addressed on the experience of female stroke patient about sexuality and this study will be beneficial for an occupational therapist to understand the problems of sexual

relationship of female stroke patient, perception of female stroke patient about their sexuality and the way of maintaining sexual life thus facilitate the total occupational therapy (OT) intervention.

1.1. Background information

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 can affect a female's physical, functional, psychological and social aspect as well as their sexuality. This can lead to problem to adjust their sexuality in personal lives.

Centre for the Rehabilitation of the Paralysed (CRP) is a rehabilitation center in Bangladesh for stroke patient. During the placement of neurological department and community based rehabilitation (CBR), researcher observed that stroke patient faced difficulties to maintain their sexual functioning that create an adverse effect on their quality of life.

Stroke can damage existing romantic and sexual relationships of the stroke patient. That's why they face difficulty to build loving relationship with their partners (Murry and Harrison, 2004).

Korpelainen, Nieminen and Myllyla (1999) argued sexual dysfunction and dissatisfaction are common after stroke. Stroke patient experiences fear of impotence, failure to discuss sexuality and refusal to participate in sexual activity. It is stressful to maintain spousal relationship as their sexual satisfaction is decreased. These all have a significant impact on each individual's quality of life.

In Japan, it was conducted a research study among 100 stroke patients to find out the prevalence of sexual dysfunction. Among them, 55% of 100 stroke patients reported that their sexual functions were decreased after stroke and there is chance to impairment of quality of life of stroke patient (Kimura *et al.*2001).

On the other hand, a qualitative research was conducted in United Kingdom to explore the experience about spousal relationship of 16 stroke patients. All of stroke patients reported that their sexuality is significantly changed by stroke and it affects on their quality of life (Thompson and Ryan, 2009).

For ensuring quality of life of a female stroke patient it is needed to appropriate guide for them about sexuality during rehabilitation. Still there are large number of international studies have been done on this topic but there are little number of study available about sexuality in Bangladesh.

An occupational therapist has a great role in stroke rehabilitation so that the client can maintain their quality of life as much as possible. Every person has physical demand and they want to lead happy sexual life. Otherwise it can create unpleasant effect on their sexual life, family life as well as social life. In case of female stroke patient, they face many difficulties to maintain their sexual life as well as quality of life. As they do not maintain their sexual life, they face difficulty to build any intimate relationship with their husband and family members. So it is needed to include sexuality during OT treatment session for improving their quality of life. This study will help for an occupational therapist to know the perception about sexuality of a female stroke patient and how do they maintain their sexual life so that it will possible to ensure their better rehabilitation care. So as an OT student I was interested to conduct this research.

1.2. Significance of the study

The researcher broadly explained about the perception of female stroke patient about their sexuality. Along with this, sexual problems and how female stroke patient can maintain their sexual life after stroke also be described. Female stroke patients experience different physical, emotional and mental changes that affect their sexuality. Sexuality is a more sensitive issue for Bangladeshi's society and culture. In this country, most of the people escape this issue and they do not want to share with others because of their shyness. After stroke, it is very necessary to understand and address this issue both female stroke patient and their partners. Sexuality is a part of ADL and an occupational therapist can work with a patient in terms of their sexuality. If occupational therapists develop the knowledge about sexuality, they will be able to develop skills for the client on this topic in rehabilitation program (American Occupational Therapy Association, 2008).

An occupational therapist can work with the client about their sexuality as it is an important part of the human experience. Sakellariou and Sawada (2006) argued OT profession considers that occupational therapists should be aware of sexuality of the

client and integrate it into therapy because OT treats a person from the perspective of holism.

In Bangladesh, there is not enough research regarding stroke related to sexuality. Though sexuality is an important part of stroke patient but they can not share their sexual issues with health professionals because of shyness and discomfortness. As a result, they can not maintain their sexual life properly and there is a possibility to occur secondary complications (such as, depression) which create many problems in their personal life as well as soial life and there is possibility to get adverse or little treatment outcome as expected. Soultimate outcome of OT treatment with not so fruitful. This research will help an occupational therapist to know the experience of female stroke patient about sexuality and how it will influence the life of the patient. Soan occupational therapist will include the sexuality intervention in their treatment sessions. The findings of this study provides an opportunity for rehabilitation programs to collaborate and develop training programs to adequately prepare providers for discussing patient concerns related to this challenging topic. This study can also be assist other health professionals such as, social worker, counselor and sex educator on this topic.

Finally, from this research study female stroke patient will get appropriate education from an occupational therapist who has expand knowledge by the study and it will create a best rehabilitation program outcome which indicates the best services to female stroke patient.

1.3. Aim of the study

The main aim of this study is to explore the experience of female stroke patient about their sexuality.

1.4. Objectives of the study

- To understand the problems of sexual relationship of female stroke patients that they faced after having stroke
- To understand the perception of female stroke patient about sexuality
- To understand how do female stroke patient maintain sexual life after having stroke

CHAPTER 2

LITERATURE REVIEW

This section represented the relevant information of this study. Stroke is a common phenomenon all over the world as well as highly comparative in Bangladesh. In this literature review chapter, the researcher has explained the key terms of this study. Stroke has a great effect on the individual life in all aspects like sexuality. Following stroke, there are so many physical, emotional, behavioral and communication challenges that a patient face. These problems lead to hind to build intimate and sexual relationship with spouses of a stroke patient. As a result, stroke patient suffer from secondary complication such as, depression, loss of control and grief as well as it can hamper on ADL of the patient (Rosenbaum, Vadas and Kalichman, 2014). As sexual activity is an important part of an individual's quality of life, it is necessary to adapt a stroke patient in their sexuality. Appropriate education will help them to continue and cope with a new life. In rehabilitation of stroke patient, along with physical treatment it is needed to include subjective perception about sexuality and collaborate with patient and their partners thus facilitate better sexual life (Calabro and Bramanti, 2014). Schmitz and Finkelstein (2010) argued it is needed to address stroke related sexuality in post stroke rehabilitation.

2.1. Stroke

A stroke can be defined as- "*A stroke or Cerebro vascular 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).

So, stroke is a serious life threatening condition that brings various physical, mental and social problems. Worldwide stroke is the second leading cause of the disability and 1 in 6 people may have a stroke in their life span (Stroke Association, 2013). Stroke is a leading cause of neurologic impairment as well as functional disability.

There are so many problems arise from a stroke such as, changes in role, identity, changes in personality, sexuality and social functioning. These all problems create obstruct to maintain spousal relationship happily of a stroke patient (Thompson and Ryan, 2009).Sexuality of a stroke patient may hamper of being a stroke. Stroke related sexuality is a complex state of stroke survivor with physical disability thus strongly influence on sexual relationship after stroke (Song *et al.* 2011).

2.1.1. Stroke in Bangladesh

Stroke is the third leading cause of death in Bangladesh. Due to stroke, the mortality rate of Bangladesh is 84 in the world. Islam *et al.* (2013) argued the incidence of stroke in Bangladesh is 0.3%.

According to the latest data of WHO, 82039 people were died from stroke and it is 8.57% of total death in Bangladesh (World Health Rankings, 2010).

2.1.2. Effects of stroke

Brain is divided into two hemispheres: right and left. These parts are responsible for controlling the particular function to opposite side of the body. Following a stroke, different effect can be created as per involvement of hemisphere. The disorder of left part of brain represents the effect in the right hemiplegia and disorder of right part of brain represents the effect in the left hemiplegia. According to Gurman (2001), the following chart represents the effects of stroke-

Right hemiplegia	Left hemiplegia
<ol style="list-style-type: none"> 1. Wernicke’s and Broca’s Aphasia 2. Sensory and motor problem in right side of the body 3. Acalculia: inability to calculate math problems 4. Agaphia: inability to write words 5. Alexia: inability to read written words 6. Motor impersistence 7. Difficult to communicate and understand 	<ol style="list-style-type: none"> 1. Aphagia or difficulty in eating, disarticulation, or problem of vocalization 2. Impairment in the recognition of physical reality 3. Visual spatial problems 4. Difficulty to give attention 5. Sensory and motor problem in left side of the body 6. Agnosia and pusher syndrome 7. talkativeness

8. Problems of memory	8. Change of personality
9. Behavioral changes such as, depression and hesitancy	9. Behavioral changes such as, unawareness about situations, impulsivity, inappropriateness and depression

Table-1: Effects of stroke between right and left hemiplegia

2.2. Sexuality

Sexuality is characterized by our sexual thoughts, desires, feeling, erotic fantasies and experiences. Sexuality contains a person's emotional, social and developmental aspects (Sexuality, 2012).

Sexuality can be defined as- *“a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled”* (World Health Organization, 2015).

Human sexuality has been identified as- *“Complete attribute of every person involving deep needs for identity, relationships, love and immortality. It is more than biologic, gender, physiologic processes, or modes of behavior; it involves one's self- concept and self-esteem. Sexuality includes masculine and feminine self-image, expression of emotional states of being and communication of feeling for others and encompasses everything that the individual is, think, feels or does during the entire lifespan. Sexual behavior more than any other behavior is intimately related to emotional and social well- being”* (Foster, 1996).

The term sexuality becomes different by religion, culture, ethnicity and education. Sexuality is the way to create relationships, how we related to each other and how we communicate with other. It is a mutually satisfying way to be intimate with another and cover an extent of expressions like holding hands, flirting, touching, kissing, masturbating and having sexual intercourse.

2.3. Stroke and sexuality

After a stroke, sexuality can be unrecognizable even depressing. Sexuality is an essential part of human daily life to make intimate relationship with other and covering wide range of dimensions such as, psychological, biological, behavioral and interpersonal (Tannura, 2012). Stroke affects sexuality of a patient and sexual dysfunction is high with approximately 57-75% of stroke patients (Korpelainen *et al.* 1998). The following points are described the challenges that affect sexuality after stroke:

➤ Physical challenges

There are many physical problems that affect sexual functioning after stroke. Approximately 80% of stroke patients face difficulty in movement problems (Stroke Association, 2013). By changing neuro-endocrine function, stroke hampers the normal sexuality of the patient. As a result, various types of neuromuscular changes are seen such as, fatigue, weakness and spasticity that affect mobility. Schmitz and Finkelstein (2010) argued sexual function of the stroke patient affected by physical problems. Sensation is one of the major issues for performing sexual function.

➤ Communication challenges

According to Chaurasia (2004), brain is responsible to control communication between human and environment. Stroke can affect speaking, understanding, reading or writing. Due to stroke, common speech problems like aphasia, dysarthria and dysphasia may be occurred. Various cognitive problems such as, memory problems, inability to judgment, problem in attention and inability to interact with other may affect social and sexual function. As sexuality is a complex form of human communication, it is affected by verbal and non-verbal communication. Inability to make a relationship creates due to impaired communication have an adverse effect on sexual functioning among stroke patient Farman and Friedman (2004).

➤ Psychological challenges

Psychological problems may affect sexuality of a patient (Sjogren and Fugl-Meyer, 1982). After stroke, various psychological problems such as, depressed mood, feeling frustration, anger, anxious, fear of relapse, denial and anxiety that affect sexuality of a stroke patient (Stroke Recovery Association, 2014). These problems are responsible

for loss of interest and loss of independence to lead sexual life happily and making sex difficult (Thompson and Walker, 2011).

2.4. Normal female sexual function

Interaction between the nervous system, the endocrine system and the vascular system are important for sexual function. It is need of physiological capacity for occurring desire, arousal and orgasm in sexual function. Sexual function is also integration of the genitalia, co-ordination of blood flow, activation of a range of smooth and skeletal muscles and the stimulation of local secretions (Nagaraj *et al.* 2009).

There are four phases of the sexual response cycle of women such as, excitement, plateau, orgasm and resolution. Many sexual dysfunctions can be categorized according to the phase of sexual response.

The phase of sexual arousal or excitement, physiological reactions take place as a result of somato-sensory or psychogenic stimulation. This phase continues from a few minutes to several hours and is characterized by a subjective sense of an individual. The woman's breasts become fuller and the vaginal walls begin to swell. These responses may be accompanied by other bodily changes like increase muscle tension, increase heart rate, increase breathing, skin may become flushed and nipples become hardened (Farman and Friedman, 2004). The next stage is plateau.

In plateau stage of female, body starts to prepare for orgasm. The clitoris becomes sensitive and vagina's tissue begins to swell. Breathing, heart rate and blood pressure continuously increase. Muscle spasm may begin in the feet, face and hands (Nagaraj *et al.* 2009).

Following plateau, the next stage is orgasm. Guyton and Hall (2001) suggested that orgasm is characterized by climax of sexual pleasure associated with rhythmic contractions of perineal muscles. Pulse rate, blood pressure and respiration become high (Jannini, Buisson and Rubio-Casillas, 2014). Doak and Rogers (2008) argued during orgasm the cardiac response peak heart rate is of 110 to 180 beats every minute.

The final stage, resolution is characterized by the return to normal level of functioning of the body. Swelled and erect body parts back to previous size and color. This phase

is marked by a general sense of well-being, enhanced intimacy and often fatigue (Farman and Friedman, 2004).

In the 1960s, the healthy sexual cycle has established by Masters and Johnson as linear model which is described in above four phases of the sexual response cycle: excitement, plateau, orgasm, and resolution (Damjanovic, Duisin and Barisic, 2013).

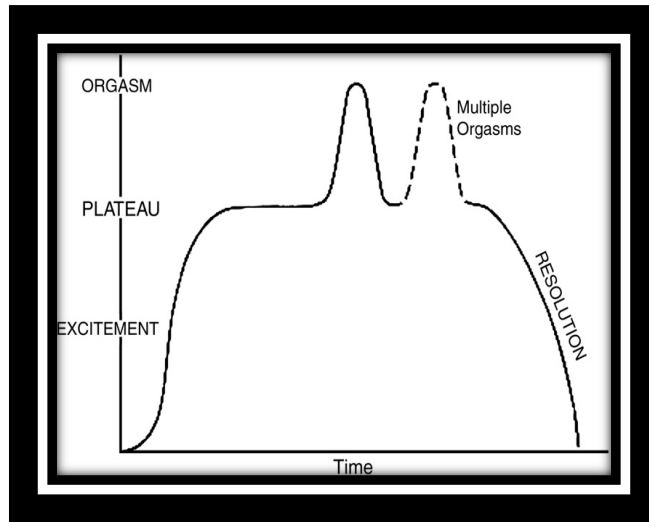


Figure 1: Linear model as sexual response cycle

(Source: <http://www.mydoctor.ca/documents/users/3783/20093.pdf>)

Basson (2002) argued a “Sexual Response Circle” that considers psychological and social aspects of female sexual function such as, emotional intimacy and sexual satisfaction.

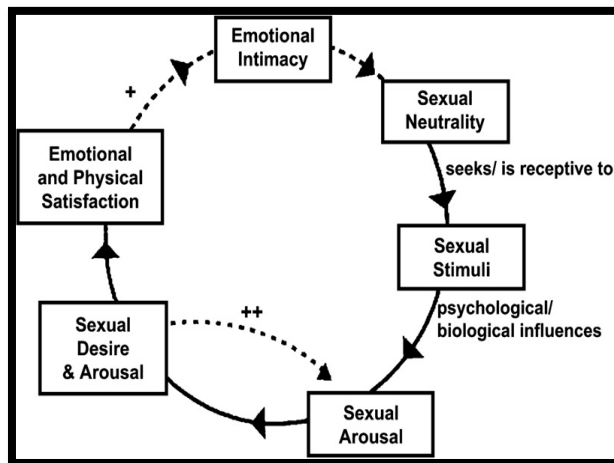


Figure 2: Intimacy-based model for healthy female sexual function

(Source: <http://www.mydoctor.ca/documents/users/3783/20093.pdf>)

This figure of model recognizes the female sexual function as emotional satisfaction (Damjanovic, Duisin and Barisic, 2013).

2.5. Normal male sexual function

There are four stages of male sexual function: excitement, plateau, orgasm and resolution. The male sexual function can be influenced by endocrine system, neurotransmitter and central nervous system (Meston and Frohlich, 2005).

The excitement phase continues from minutes to hours and triggered by thoughts, images, touch, scents or any parasympathetic stimulation. Physiological signs of this stage include increase muscle tension, heart rate, breathing and blood pressure. Skin becomes flush and nipples become harden (Meston and Frohlich, 2005). The next is plateau.

During plateau, the penis and testes continuously increase in size. Some involuntary body movements of face, hands and feet are seen in this stage. Heart rate, muscle tension and breathing increase constantly (The Stages of male sexual response, 2014).

Following plateau, the next phase is orgasm. This phase is divided into two stages: orgasm and ejaculation. In this phase, respiratory rate, heart rate and blood pressure may be elevated. Orgasm described as the climax of the sexual response cycle which lasts a few seconds to a minute. During ejaculation, semen exits the body through the urethra and rhythmic contractions may be felt at the head of the penis (Guyton, 1991).

Resolution is the last phase, continues from 10 to 15 minutes when the body begins to return to an unexcited state. This phase is characterized by feeling of increased intimacy and relaxation. Muscles often begin to relax and skin returns to a non-flushed color (Farman and Friedman, 2004).

2.6. Effects of stroke in sexuality

Stroke creates problem in sexuality because it affects the nervous system. Stroke hamper the normal female sexual response associated with sexual arousal disorder, decreased libido, vaginal lubrication, genital sensation and lack of ability to achieve orgasm (Berman, Adhikari and Goldstein, 2000).

Low sexual desire or sexual desire disorder occurs when women may experience of diminished libido or lack of sex drive for sexual functioning (Female sexual dysfunction, 2014). Following stroke, arousal disorder is the second most common form of sexual dysfunction is characterized by lack of sexual thoughts that affect the excitement phase. Arousal disorders occur as a result of disturbing physical and psychological factors such as, vaginal dryness, anxiety or distraction (Leiblum, 2003). Orgasmic dysfunction is characterized by the unable to achieve sexual climax (Krans and Krucik, 2012). Painful intercourse or dyspareunia is another form of sexual dysfunction in women is characterized by vaginal dryness and occur ultimate as vaginismus (Sexual Disorders, 2014).

Like female, a male stroke patient may also face various sexual problems which affect the sexual function of his female partner. Both physical and psychological factors can bring sexual function into a problem (Understanding Male Sexual Problem, 2014).

Because of having stroke, a male suffers mostly from ejaculation problem in which there is no semen from the penile during climax time (Ejaculatory Disorders, 2014). Erectile dysfunction also known as impotence is characterized by unable to maintain an erection for sexual functioning. The orgasmic disorder occurs when there is no ability to get orgasm to sexual stimulation or may occurrence of delay orgasm (Male Orgasmic Disorder). Decreased sexual desire and limit the frequency of intercourse can be seen after stroke. Various side effects such as, headache, muscular pains, hot flushes, tearing can affect normal sexual intercourse (Sansalone, 2014).

All of above mentioned problems can disrupt the stroke patients in their normal sexual function. So it can be said that impairment of one stage of sexual function can affect the subsequent phases. Stroke disrupts the normal sexual function of women and men which obstructs to take participate actively in sexual activity. Difficulty to express sexuality of a stroke patient may affect on spousal relationship. As a result, spouse of the stroke patient deprive from their sexual needs (Blackwell, 2009). Because of having stroke, there is significantly change in spousal role both stroke patient and their partners (Palmer). ADLs such as, leisure activity, self-care activities including sexuality and social works can be disrupted of stroke survivors due to stroke. Emotional health of spouses of stroke patient becomes change because of caring stroke patient and restriction of doing daily activities (Warleby, Moller and

Blomstrand, 2004). Quality of life of spouses of stroke patient is associated with stroke patient's physical and cognitive impairment. Stroke affects the daily occupation, sexuality, leisure activities and social works of spouses of stroke survivors. All aspects of life of spouses are influenced and changed by the stroke. So they are less satisfaction about their life (Ostwald, Godwin and Cron, 2009).

2.7. Role of Occupational Therapy in sexuality

Sexuality is a major aspect of the human experience that expresses gender identities, roles, eroticism, sexual orientation, intimacy, sex and reproduction. There is an association between quality of life and sexuality. Difficulty or obstruct to express sexuality is reducing the quality of life of an individual.

Occupational therapists are concerned with promoting occupational participation, inclusion and engagement by enabling clients to take part in meaningful and purposeful occupations. Sexuality does not mean just one activity but it is constitute a wide range of activities including grooming, making dinner for a partner, dating or having sex. Occupational therapists assist to express of sexuality in many aspects (Hyland and Grath, 2013).

Occupational therapists treat a person in holistic sense and facilitate to participate in meaningful activities as much as possible. As sexuality is a part of ADL, an occupational therapist can work with a person in their sexuality (American Occupational Therapy Association, 2008). Both client and their partners include in OT intervention and intervention can take place in many places such as, homes, nursing center, rehabilitation institute, community health centers, pain centers, hospitals, retirement communities and other venues. It has been proposed (Farman and Friedman, 2004), an occupational therapist has a full right to practice sexuality with a patient because reported on a study that 88% of 55 OT programs included training about sexuality. So, they are in excellent position to work about sexuality.

Sexuality should be considered in OT program (Andamo, 1980). An occupational therapist can work with a stroke patient to address sexuality as well as sensory, motor, cognitive and psychosocial impairments that affect sexuality of the patient. As sexuality is a basic life skill, different type of coping strategies may include in OT

session such as, alternative positions to perform sexual intercourse, use of sex devices, alternative techniques to achieve sexual satisfaction (Foster, 1996).

This was proposed by Burton (1996), an occupational therapist can facilitate the patient's achievement of an optimal level of independence and responsible for evaluating the sexual functions both patient and their partners.

CHAPTER 3 METHODOLOGY

3.1. Study Design

Researcher used phenomenological qualitative research design to know about the experience of female stroke patient about their sexuality. As qualitative research can address the experience of particular event and how the life circumstances are influenced through the event of the people so the researcher used qualitative research design (Patton and Cochran, 2002). This was examined in Bailey (1997), "*Qualitative research tries to verify or generate descriptive theory that is grounded in the data gleaned from the investigation*". Phenomenological perspective can be implemented to any study where the investigator concerns with peoples' view on their own life or situation. This phenomenological qualitative research design can be used to knowing living experienced of the participants (Kitzmler, Asplund and Hggstrm, 2012). According to Hick's (2000), when the researcher willing to find out the research questions in search of experience, feelings and performance of the participants a qualitative research design is appropriate for the study. As has been argued (Masson, 2001), with the purpose of writing the oral histories of participants there is need to qualitative research design by a qualitative approach and it is suitable for gaining insights, judgment, experience and perception of the participants. This research aim is to explore the experience of female stroke patient about their sexuality and it has represented the participants own experience of view. So the researcher used phenomenological approach of qualitative research design.

3.2. Sampling

The aim of this study was to gain comprehensive understanding of the female stroke patient about their personal experience in sexuality. The researcher used purposive sampling for this qualitative study who met the inclusion criteria. Purposive sampling was used because the researcher used judgment for selecting participants (French, Reynolds and Swain, 2001). Sample was collected from a wide range of population. Purposive sampling method is used in qualitative studies to study live experienced of a specific population by using specific selection criteria. Sample sizes are very small and there is not necessarily representative of the vast population in qualitative research study (Patton and Cochran, 2002). Eight participants were selected by using

purposive sampling according to criteria to conduct the study and the sample size was depended on data saturation. In qualitative research, data saturation means where the researcher select sample size and the data is obtained in repeatedly then qualitative researcher do not take any participants for data collection (Saumure and Given, 2013).

3.3. Inclusion criteria

- Female stroke patient those were continuing OT treatment at CRP.
- Female stroke patient who has been suffering from stroke for at least 3 months.
- Age: 21-45 years.
- Those female stroke patient were assessed by qualified occupational therapist for their cognitive function and they would be able to participate this study if their cognitive function is enough well to deliver the answers.
- Female stroke patient who have intact speech to express her experience.

3.4. Study settings

It has been proposed (Hammel and Carpenter, 2000), in the qualitative research the researcher observes and interacts with the participants in their own context. In this qualitative research, participants need an environment where they share experiences about sexuality with comfortable because sexuality is a very sensitive issue. This qualitative study was conducted in Savar and Mirpur CRP. For data collection the researcher used that places which were recommended by the participants and where the participants feel comfortable to express their experiences.

3.5. Informed consent

The researcher developed a consent form in Bangla Appendix 3A and English Appendix 4A for taking consent from participants. During interview, the researcher took permission from each participant who was interested to participate with signature on a written consent form and researcher also took signature of the witness. Researcher clearly explained the role of the participants in this study and informed them that they were not harmed by this study. Researcher also discussed the benefit of this study. Participants were informed that the given information would not share with others except the research supervisor. Researcher clarified the rights of the participants.

3.6. Field test

A field test was conducted with two participants. Before the time of final data collection, it was necessary to conduct a field test to help the researcher for purifying the data collection plan. During the interview, researcher informed the participants about the aim and objectives of the study. From the field test the researcher was aware about which part of the question participant found difficulty or they did not understand properly. Researcher observed the situation of the interview, participant's response thus help to modify the question where necessary. Finally, the question was developed in Bangla (Appendix 3C) and English (Appendix 4C).

3.7. Ethical consideration

The researcher has maintained some ethical considerations like:

- Researcher had to take the permission from Bangladesh Health Professions Institute (BHPI), the academic institute of CRP.
- Researcher had to take the permission of neuro-musculoskeletal unit both Savar and Mirpur CRP for data collection.
- The participants were informed before to invite her participation in the study.
- A written consent form which has written in Bangla (Appendix 3B) used to take the permission of each participants of the study.
- The researcher has ensured that all participants were informed about their rights and reserves and about the aim and objectives of the study.
- All kinds of confidentiality would be highly maintained. The researcher would have to ensure not to leak out any type of confidentialities.
- The researcher would be eligible to do the study after knowing the academic and clinical rules of doing the study about what should be done and what should not be.
- All rights of the participants would be reserved and researcher was accountable to the participant to answer any type of study related question.

3.8. Materials of data collection

- ✓ Audio recorder was used to record interview of the participants for judgment and it is the most appropriate method for recording interview. In qualitative research, the researcher used tape recorder to replace the hand writing

particularly by which the researcher observes and records participant's life or views (Bloor and Wood, 2006).

- ✓ Paper and pen were used to write down the observation note or any other information that was obvious needed to research study.
- ✓ Questions
- ✓ Consent form
- ✓ Information sheet
- ✓ Clip board

3.9. Data collection procedure

All data was collected through face-to-face in-depth interview by using a semi-structured research question. In this study, the researcher has explored the experience of female stroke patient about their sexuality. In-depth interview has conducted in this study to collect data thoroughly from the participants (Patton and Cochran, 2002). With in-depth interview participants would be given freedom to explain their feelings and experience or perception in their own words. They would also receive opportunity to talk and describe their feelings and real facts or incidents (Bloom and Crabtree, 2006). This interview procedure would provide the opportunities to observe the facial expression of participants and would help the researcher to determine their understanding of the questions. The question was written in Bengali so it would be easily understood for all participants. The researcher started from the initial stage of the data collection procedure. At first, the researcher would verbally present the details of the study such as, aim, objectives and purpose of the study then explain the rights, roles, benefits and importance of the written consent form in a descriptive way and arranged the interview in a suitable place. Before starting the interview, the researcher asked the participants about the place of interview. When the participant agreed with the researcher and they felt comfortable with the place, then the researcher started to interview. During the interview, a recorder was used to record the conversations and discussion between the participants and interviewer. Recorder, paper and pens also used during interview for writing the additional information from the participants.

3.10. Data analysis

In the qualitative research, it was suggested to analyse the collected data to organize the information according to different codes, categories and themes (Bowling, 1997). Data analysis allowed the researcher to establish the study aims according to collected information from participants. The appropriate analysis of data would give an accurate result for the study. The researcher selected Qualitative Content Analysis (QCA) method for analyzing data. QCA follows the three steps (coding, categorizing and generating theme) to present the result of the study. The analysis of data began from transcribe of interviews. At first, the researcher would organize the interviews and transcribe the entire interview in Bengali from the audio tape recorder. Each of the transcripts were translated from Bengali to English by 3 different individuals, one was the researcher and another two were such person who did not know about the aim or objectives of the research question. Then the researcher would verify all of the transcriptions and read it several times to find out what the participants wanted to say. Following that, the researcher confirmed the data and found the actual themes of the study. When the researcher would notice some similarities between the data, the researcher would organize the data according to some major categories and under those categories some codes would be established. The codes came out from the research question and each code was separated from each other.

3.11. Rigour

This study was conducted through rigorous manner or trustworthiness. The entire study was conducted in a systematic way by following research steps under the supervision of an experienced supervisor. At the time of data collection and data analysis, the researcher never tries to influence the result by her own value or perspectives. The researcher accepted answers of the participants whether they would deliver. The researcher prepared transcript from the field notes and audio recording. Soon after the interview it was written. Translation has completed by three people to avoid biasness then researcher completed the same translation and record to reduce mistake and compare it with the Bangla transcript. The researcher has checked translated data for several times so that all information would be include. All of notes kept safe to maintain confidentiality. In the result chapter, the researcher would not influence the result by personal view.

Table-2: Summary of data analysis and result

Aim of the study	Objectives of the study	Question	Categories	Theme
The main aim of this study is to explore the experience of female stroke patient about their sexuality	1.To understand the problems of sexual relationship of female stroke patients that they faced after having stroke.	Question-3 Number-2,3,9	<ol style="list-style-type: none"> 1. Problems that affected sexual relationship of female stroke patient 2. Understanding the effects of difficulties to take part in sexuality on daily living activities of female stroke patients. 	<ol style="list-style-type: none"> 1. Paralyzed limb affects sexual relationship of female stroke patient. 2. Difficulties in sexuality make female stroke patients sad to be engaged in their ADL.
	2.To understand the perception of female stroke patient about sexuality.	Question-1 Number-1	<ol style="list-style-type: none"> 1. Understanding about sexuality of female stroke patient. 	<ol style="list-style-type: none"> 1. Female stroke patients are knowledgeable about sexuality.

	<p>3.To understand how do female stroke patient maintain sexual life after having stroke.</p>	<p>Question-5 Number- 4,5,6,7,8</p>	<ol style="list-style-type: none"> 1. Understanding about the way of maintaining sexual life. 2. Discussion with husband regarding problems of sexual activities. 3. Changes in intimacy of sexual partner in sexual relationship. 	<ol style="list-style-type: none"> 1. Physical support is required from partner to maintain sexual relationship. 2. Female stroke patients do not discuss with their husband regarding their sexual problem. 3. No change in intimacy between female stroke patients and their husband in sexual relationship.
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CHAPTER 4

RESULT and DISCUSSION

In result and discussion chapter, it has presented the result of the research study and presented the findings by using different literature. In qualitative studies, it is common practice to present result and discussion together in one section (Bailey, 1997). Result part of this section has described as completely so that it is possible to judge the findings of the study. By using tables and figures it has demonstrated the findings of the study. The discussion section is as a-“*comment section placing the results in context with the published literature and addressing study limitations*” (Graf, 2008).

The aim of this study was to explore the experience of female stroke patient about their sexuality. There were three objectives of this study. First objective was to understand the problems of sexual relationship of female stroke patient that they faced after having stroke. Under this objective question no. 2, 3, 9 were used and two categories were emerged. Category 1 was emerged by using question no. 2 and 3. Category 2 was emerged by using question no. 9.

Category 1: Understanding about problem that affect sexual relationship of female stroke patient.

Under this category one theme was emerged as follows-

Theme 1: Paralyzed limb affects sexual relationship of female stroke patient.

Category 2: Understanding the effects of difficulties to take part in sexuality on daily living activities of female stroke patients.

Under this category one theme was emerged as follows-

Theme 2: Difficulties in sexuality make female stroke patients sad to be engaged in their ADL.

Second objective was to understand the perception of female stroke patient about sexuality. Under this objective question no. 1 was used and following one category were emerged,

Category 1: Understanding about sexuality of female stroke patient.

Under this category one theme was emerged as follows-

Theme 1: Female stroke patients are knowledgeable about sexuality.

Third objective was to understand the way of maintaining sexual life of female patient after stroke. Three categories were emerged to achieve this objective. Category 1 was emerged by using question no. 4, 6, and 7. Category 2 was emerged by using question no. 5. Category 3 was emerged by using question no. 8.

Category 1: Understanding about the way of maintaining sexual life.

Under this category one theme was emerged as follows-

Theme 1: Physical support is required from partner to maintain sexual relationship.

Category 2: Discussion with husband regarding problems of sexual activities.

Under this category one theme was emerged as follows-

Theme 2: Female stroke patients do not discuss with their husband regarding their sexual problem.

Category 3: Changes in intimacy of sexual partner in sexual relationship.

Under this category one theme was emerged as follows-

Theme 3: No change in intimacy between female stroke patients and their husband in sexual relationship.

According to categories and coding it has given the description of theme at below:

Theme 1: Paralyzed limb affects sexual relationship of female stroke patient

Following stroke, there are many effects have seen both physically and psychologically. But some of the very most common effects of stroke are physical like experiencing paralysis, muscle weakness, stiffness, reduces perception of body position usually one side of the body. These all are creates problem to move particular side of the limb (Stroke Recovery Association, 2014).

Coding	P1	P2	P3	P4	P5	P6	P7	P8
Paralysis of limb	✓		✓	✓	✓		✓	✓
Lack of ability			✓					
Difficulty to hug			✓					
Decreased libido				✓	✓		✓	
Difficulty to move limb				✓	✓			✓
Feeling bad							✓	
No problem		✓				✓		

Table 4.1: Problems affected sexual relationship of female stroke patient

Most of the participant said that paralysed limb is the most barriers to build sexual relationship with their husband. Around half of the participants said that they feel lack of interest to involve sexual relationship with their husband. Few participants said that they have no problem to maintain sexual relationship after stroke.

One of the participants mentioned that,

“Yes, I have so many problems after stroke. My paralysed hand creates so many difficulties for me to use. As a result, I cannot hug my husband due to paralysed hand”.

Another one of the participants said that,

“I cannot move my hand and leg during sexual relationship with my husband. These create so much difficulty in my sexual life”.

Information available from their website (Physical effects of stroke, 2013) around 80% stroke survivors experience movement problems which are raised from paralysis. Due to paralysis, stroke survivors face difficulty to use and move the limb as they belong to these limbs. These problems have a great impact on the sexual relationship of the spousal life of female stroke patient.

One of the participants added that,

“Yes, I have problem. I have problem in my right sided hand and leg. So, I cannot use these during sexual relationship”.

In patient’s life stroke has intense impact, including sexual functions and sexual relationships with the partner. Physical impairments can prevent a person or a couple from achieving the sexual positions appropriately (Cheung, 2008).

Some of the participants reported that their interest to build sexual relationship has decreased after stroke which is known as decreased libido. This is very common in female after stroke.

One of the participants mentioned that,

“Nowadays my interest to build sexual relationship with my husband has decreased after stroke”.

Another participant differently added that,

“Yes, it has seemed to be changed in my sexual ability. Now I feel not better, I have no interest to involve in sexual relationship. I feel bad after illness”.

Kimura *et al.* (2001) argued decreased or diminished libido is common after stroke and it creates problem to maintain sexual relationship as well as spousal relationship between stroke survivors and their partners.

Others have shown (Akinpelu *et al.* 2013) decline or decreased libido has significantly impact on sexual functioning of stroke patients. So, decreased libido has a negative impact on spousal relationship of the stroke survivors.

Few participants said that they have no problem to cope sexual relationship with their husband.

One of the participants stated that,

“No, I have no problem to maintain sexual relationship”.

Another one participants added that there are so many problems immediate after stroke of her but at present she has no problem to build sexual relationship. Because she thinks that there is a limited problem in her limbs as she overcomes these gradually.

If the limb has mild weakness there is no chance to paralyse of the particular limb and it is possible to move this limb with some difficulties which is overcoming (Physical effects of stroke, 2013). So a person who has mild weakness in the limb is not face so many difficulties and is capable to use limb rather than who has severe problems.

Theme 2: Difficulties in sexuality make female stroke patients sad to be engaged in their ADL

Along with physical problem, various mood problems create difficulty to perform daily activities of stroke patients. The symptoms of depression, anxiety, apathy are the most common behavioral and emotional incidences after stroke which can hinder the performing the daily activities of the person. After stroke, there is a significantly changed in ADLs of people with stroke. The performance of ADLs has seen to be worsened after stroke in survivors (Stroke Recovery Association, 2014).

Coding	P1	P2	P3	P4	P5	P6	P7	P8
Feeling sad			✓	✓	✓	✓	✓	✓
Lack of interest			✓		✓		✓	
Feeling bad			✓					
Feeling of hopeless				✓				
Feeling of guilty				✓				
Feeling worry								✓
No effect	✓	✓						

Table 4.2: Understanding ADLs with psychological changes of female stroke patient

From this table, it has seen that most of the participants reported that their daily activities are hampered due to sadness after stroke.

One of the participants said that,

“(Answer yes by quivering head) Now I feel bad and lack of interest to do perform daily activity as I feel sad”.

Another one of participants mentioned that,

“Yes, I am feeling sad; from this, death is the better for me. I feel guilty when I communicate with my husband”.

Every human being has a unique profession. Every day various activities are performed by human being. All of activities are divided into three parts: self care, productivity and leisure. All human are included in these parts and these parts are very important for all. The entire quality of life is depending on these all activities (Daily living impact of stroke, 2014). If any one part is disrupted then whole quality of life will hamper. Any illness or disability like stroke creates negative impact on the quality of life of the patient (Hosain, Atkinson and Underwood, 2002).

One of participants added that,

“For sometimes I feel sad when these are remembered. I think that only who can understand problem these are own”.

The symptoms of depression are very common trait after stroke. Depression is characterized by feeling of sadness, feeling of hopeless and feeling of helplessness.

These problems have great impact on the daily activity such as, eating, sleeping, and thinking (Monti, 2011).

Depression can obstruct the constitute relationship of husband and wife (Stroke Foundation of New Zealand). Depression often reduces libido and drugs for depression may also reduce libido. This can put strain on the sexual relationship with partners (Depression Health Center, 2015).

In fine, it can be said that depression is the main psychological problem after stroke. In OT treatment session, it is necessary to motivate the patient to perform ADLs as much as possible. If psychological problems treated well it will be benefited to stroke survivor for ensuring better quality of life (Haghgoo *et al.* 2013).

Theme 3: Female stroke patients are knowledgeable about sexuality

Sexuality is very important in every human life. Sexuality is a central dimension of the human experience. Sexuality is reflected and expressed in many aspects of life like gender identities and roles, values, self-image, sexual orientation, intimacy, sex and reproduction (Sexuality, 2012).

Coding	P1	P2	P3	P4	P5	P6	P7	P8
Feeling between husband and wife	✓			✓				
Sexual intercourse	✓							
Physical relationship of husband and wife	✓		✓	✓	✓	✓		
Staying husband and wife together		✓						
Hugging with husband			✓					
Loving relationship with husband			✓				✓	
Sympathetic relationship between husband and wife				✓				
Intimate relationship between husband and wife								✓

Table 4.3: Understanding about sexuality of female stroke patient

Sexuality is an important aspect in human life. Sexuality is different from person to person. Generally, sexuality meant by feelings and attraction that a person feel towards other people (American Psychological Association, 2011). Stroke has a great impact on sexuality in survivors. Stroke has profound and negative impacts on the patient's life such as, sexual functions and relationships with the spouse or partner. Sexuality is very essential for maintaining social relationships. Stroke survivors have ability to maintain sexuality by coping with problems that imposed by disability (Giaquinto *et al.* 2003).

All of the participants demonstrated the sexuality with researcher. Most of the female with stroke expressed that the relationship between husband and wife is called sexuality.

One of the participants said that,

“Sexuality is meant by staying with husband and wife together. On the other hand it may be such as, hugging and loving husband”.

Another participant stated that,

“Sexuality is the feeling, sympathy and physical relationship between husband and wife”.

Information from their website (Oxford Learner's Dictionary, 2015) *“Sexuality is the feelings and activities connected with a person's sexual desires”.*

One of participants added that,

“Sexuality means the physical relationship between husband and wife”.

Most of the participants were unable to move their one side of the body properly. This creates problem to build sexual relationship with their husband what they want. One participant mentioned that *“Sexuality is very important for person with and without disabilities. As previous it is necessary to build a good relationship between husband and wife after stroke”.*

Sexuality is a normal and natural part of human development. Every person is born a sexual being and has sexual needs. Sexuality does not mean not only physical act of

intercourse but also feelings of love, respect, closeness and gratitude shared by partners (Sex and Sexuality, 2014).

One of participants said that,

“Sexuality is the loving relationship between husband and wife”.

Another one participant added with this stated that,

“Intimate relationship is called sexuality”.

Sexuality is a very important and essential part of people with and without disabilities. Sexuality is a medium to maintain social relationship with others. Like anyone, stroke survivor has same sexual needs to maintain their spousal relationship. Sexuality is broader than sexual feelings and sexual intercourse. It can be included feelings, thoughts, behaviors, attraction, love and intimate relationship with partners. Sexuality can be differing from female to male.

Theme 4: Physical support is required from partner to maintain sexual relationship

Following stroke, a person need various support both physically and psychologically. These supports are very necessary to a lead good life as much as possible. So, physical and psychological supports are important for stroke patient.

Coding	P1	P2	P3	P4	P5	P6	P7	P8
Loss of frequency to build sexual relationship	✓	✓	✓	✓				✓
Expect support for limb position	✓		✓	✓	✓	✓		✓
Do not involve relationship after stroke					✓		✓	
Expect psychological support from partner							✓	

Table 4.4: Understanding about sexual relationship of female stroke patient

Most of the participants said that they need physical support from their husband during sexual relationship for proper limb position. Half of the participants reported that sexual relationship between them and their husband has been decreased after

stroke. Only one participant said that she needs psychological support from her husband.

One of participant said that,

“As I have problem in my hand and leg, I expect that my husband will help me to maintain hand and leg during sexual relationship”.

One participant said that,

“During physical relationship with my husband, I expect support in my left side of the body as it paralysis”.

After stroke, most of the stroke survivors have movement problem due to paralysis of limb. As a result, it is difficult to move or balance the weak limb. So they have to support physically to maintain proper limb position (Stroke Association, 2013).

Another one participant mentioned that,

“Not like before, my affected hand and leg create difficulty in my sexual life. He (my husband) helps me what I need. He supports to my hand and leg”.

Steiner *et al.* (2008) argued physical support is necessary of stroke survivors for improving mobility, preventing falls and assisting with daily activities.

Often psychological support is need for stroke survivors. One participant expressed that she needs psychological support from her husband. It is observation from researcher that this participant was sadder and worries about her illness as well as spousal relationship with her husband.

This participant said that,

“I expect psychological support only from my husband”.

Psychological support is very important for stroke patient after stroke. There are strong arguments to support the provision of psychological support for improving functional independence, mood, coping and quality of life after stroke survivors (Gillham and Clark, 2011). So it can be said that the quality of life of stroke survivor can depend on psychological care.

On the other hand, it has been reported by some participants that the sexual relationship after stroke has been decreased.

One of participants said that,

“As like before, I am maintaining sexual relationship with my husband. But the number of sexual relationship has been decreased between us”.

Another participant mentioned that,

“Now I am not maintaining relationship with my husband as like before. After illness I am involved sexual relationship with my husband just for three times. My sister-in-laws have forbidden me. They say that this illness (stroke) will arise again if I involve such kind of relationship with my husband”.

Another participant added that she is maintaining sexual relationship with her husband with difficulties but the number of sexual relationship has been decreased.

Fear about partner rejection, fear of failure to perform, decline libido, inability to move limb, poor balance create problem to make sexual relationship between stroke survivor and their partners (Stroke Foundation of New Zealand).

Theme 5: Female stroke patients do not discuss with their husband regarding their sexual problem

Discussion between husband and wife is very important after stroke for maintaining spousal relationship happily. Information from their website (Cambridge Dictionaries Online, 2015) discussion can be defined as- *“The activity in which people talk about something and tell each other their ideas or opinions”.*

Coding	P1	P2	P3	P4	P5	P6	P7	P8
No discussion between husband and female stroke patient about sexuality	✓	✓	✓	✓	✓	✓	✓	✓

Table 4.5: Discussion with husband regarding sexual activities

All of participants reported that they do not discuss with their husband about their sexual problems.

One of participants mentioned that,

“I do not discuss with my husband about problem of sexuality because my husband understands me”.

Another participant said that,

“No, he (My husband) understands my problems so I do not discuss with him”.

It is very important to discuss with partner about the difficulties that faced after stroke. Every loving relationship is depending on open communication of husband and wife (Stroke Foundation of New Zealand).

Another one participant added that,

“No, I do not discuss with my husband for my sexual difficulties. My husband understands my all problems so there is no need to discuss with him”.

Healthy intimate relationship is very important because it facilitates the recovery process of stroke survivor. After stroke, it is essential both stroke survivor and their partners to be informed and prepared to face the changes of sexuality. To reconnect and restore the feelings of closeness open communication between stroke survivor and their partner is very important. Open discussion between the stroke survivor and their partner about sex is necessary to maintain loving and happy spousal life (Rescue, 2009).

So it is very important of discussion between husband and wife about sexuality for the betterment of recovery as well as strong healthy life after stroke.

Theme 6: No change in intimacy between female stroke patients and their husband in sexual relationship

Intimate relationship is very important for spouse to lead a happy life. Intimacy can vary after stroke depending on the time passed from stroke date.

Coding	P1	P2	P3	P4	P5	P6	P7	P8
Good intimacy between husband and wife	✓	✓	✓	✓	✓	✓		✓
Husband avoid after stroke							✓	

Table 4.6: Change in intimacy of sexual partner in sexual relationship

Most of the participants reported that there is no change of intimacy with husband. Only one participant said that her husband is avoiding her after stroke.

One of participants said that,

“No, no, there is no change in intimacy between me and my husband due to stroke”.

Intimate relationship plays a central role that involves physical or emotional intimacy. Intimate relationships involve feelings of liking or loving other people, romance, physical attraction and sexual relationship with partners. Intimate relationship allows a social network to form strong emotional attachments with each other (What is intimacy and why is it so important? 2013).

Another participant mentioned that,

“No, there is no change intimacy with my husband. He is a good person like god”.

Most of the stroke survivors think that there is no difficult to build and maintain good relationship with partner as their partner is very understanding and they lead a happy spousal life (Stroke, 2015).

Only one participant said that,

“My husband is avoiding me nowadays after stroke”.

By changing roles and responsibilities, stroke can obstruct the relationships between husband and wife. Stroke patient can experience more irritable and frustration that hinder to closest with their partners (Prifysgol Bangor University, 2012).

Intimacy between husband and wife depend on the physical and psychological wellbeing of stroke survivors. Warleby, Moller and Blomstrand (2004) argued the life satisfaction including leisure, daily activities, sexual life and social contacts are lesser 4 months after stroke. Limb problem, depression, lack of mobility, poor balance creates negative experience of stroke survivors. So there is a chance to reduce intimacy between husband and female stroke survivors.

CHAPTER 5 CONCLUSION

Limitation

Limitation is one kind of matter and incidence which may occur any time of conducting and constructing the study. Every study has some limitation which is out of researcher's control (Simon and Goes, 2013).

During the time of conducting this study, there were some limitations present. By considering these limitations the researcher conducted this study. The limitations are given below:

- ❖ In this research study, only female stroke patients were included. So it is not possible to find out the problem of male stroke patient in sexuality.
- ❖ This study is a qualitative type of study. Purposive sampling was used to collect data from participants. In-depth interview was required to gain information from participants. Due to lack of interviewing skills it was not possible to collect data from participants through in-depth interview as researcher has undertaken this study for the first time.
- ❖ Partners of female stroke patient were not included in this study. Being a female researcher, it was not possible to share experiences with female stroke patient's partners.
- ❖ In Bangladeshi context, it is a new study. So there was a lack of available information related to this study such as, research study.
- ❖ During interview, researcher used audio recorder to collect data from participants. Participants have given different information rather than related information of study when audio recorder was used.

Recommendation

Recommendations for Occupational Therapists in Bangladesh:

In terms of sexuality of people with stroke, occupational therapists should address this issue during the time of treatment sessions. Occupational therapists work with patient in ADLs. In OT treatment session, sexuality needs to be included because it is a part of ADL. If occupational therapists include sexuality it will highlight the OT practice. So OT needs to give attention on this issue during the rehabilitation period.

Recommendations for further research study:

OT needs to conduct various studies related to sexuality. The study related to this topic may be benefited to OT profession in Bangladesh. This may involve:

- Experiences of male stroke patient about their sexuality.
- Effect of stroke about spousal relationship.
- Find out the OT professional and student's practice in terms of sexuality during treatment sessions.
- To discover the female stroke patient and their male partner's satisfaction about spousal relationship following stroke.
- OT needs to be addressed different studies in sexuality in different areas like Guillain Barre Syndrome (GBS), head injury.
- Further research should be conducted with large number of participants. It will help to generalize the result easily.

Conclusion

Stroke affects all aspects of life both patient and their family physically, psychologically, socially and economically and the survivors face difficulty to adjust their life after stroke (Stroke foundation, 2015). Sexuality is one of the important daily living activities. The stroke survivors face difficulty to participate in sexuality with partners because of paralysis of limb, loss of movement, lack of discussion among husband and wife. Due to stroke, their sexuality has become significantly changed.

Though partners were supportive of female with stroke for positioning to perform sexual activities, it is a mental strain for them. But most of the female stroke patients were unwilling to discuss about their sexual difficulties with their husband. Due to failure sexual relationship with partners, it will be created secondary problems such as, depression, anxiety etc. These kind of secondary problems affect the outcome of the treatment program as well as total OT treatment intervention.

These issues are needed to be included in OT treatment sessions. It is hope that the better rehabilitation for stroke patient will facilitate the quality of life of the stroke patient. As sexuality is a part of daily activity, it is necessary to include this issue for ensuring better treatment outcome. Skilled occupational therapists can help stroke patient to adjust their new life after stroke. Occupational therapists should build

rapport with patient and work with them in sexuality. Besides, an occupational therapist can help other personnel like sex therapist, counselor. So occupational therapist has a great role in sexuality so that stroke patient can lead a happy life and maintain good spousal relationship with partners.

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Appendix 1

Permission for conducting study

Date: 23.7.2014

The Head of the department

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralyzed (CRP)

Chapain, Savar, Dhaka -1343.

Subject: Prayer for Seeking Permission to conduct the research project

Madam,

With due respect and humble state that I am a student of your department. As a part of my study, I have to submit a research project. My research title is "Experience of female stroke patient about sexuality". The aim of this research is to know about the experience of female stroke patient about their sexuality. Now I am seeking your kind approval to start my research and I would like to assure that anything of my project will not harmful for participants.

May, I therefore, pray and hope that you would be kind enough to approve my research proposal and will help me to complete my study successfully.

I remain

Madam

Your most obedient student

.....*Kaniz Fatema*.....

Kaniz Fatema

Roll-08, Session-2010-2011

B.Sc. in Occupational Therapy

Approved by	Comments and signature
<p>Head of the department and Research supervisor Nazmun Nahar Assistant Professor and Head of the department Department of Occupational Therapy BHPI,CRP, Chapain, Savar, Dhaka-1343</p>	<p>It may allow her to conduct this study. Best of luck.</p> <p><i>Nazmun Nahar</i> 23.07.14</p>

Appendix 2

Permission letter for data collection



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

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

তারিখ : ২৮.০৯.২০১৪

প্রতি
বিভাগীয় প্রধান
অকুপেশনাল থেরাপি বিভাগ
সিআরপি, সাভার, ঢাকা।

বিষয় : রিসার্চ প্রজেক্ট (dissertation) প্রসঙ্গে।

জনাব,

বিএইচপিআই*র ৪র্থ বর্ষ বিএসসি ইন অকুপেশনাল থেরাপি কোর্সের ছাত্রী কানিজ ফাতেমাকে তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ০১.১০.২০১৪ তারিখ থেকে ৩০.১১.২০১৪ তারিখ পর্যন্ত সময়ে আপনার নিকট প্রেরণ করা হলো।

তাই তাকে সার্বিক সহযোগীতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

নাজমুন নাহার
সহকারী অধ্যাপক ও বিভাগীয় প্রধান
অকুপেশনাল থেরাপি বিভাগ
বিএইচপিআই।



Appendix 3A

তথ্য পত্র

আমি কানিজ ফাতেমা, বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই) এর ছাত্রী যা পক্ষাঘাতগ্রস্থদের পুনর্বাসন কেন্দ্র (সিআরপি) এর একটি শিক্ষা প্রতিষ্ঠান। আমি বি.এস.সি ইন অকুপেশনাল থেরাপি বিভাগের ৪র্থ বর্ষে অধ্যয়নরত আছি। এই কোর্সের অংশ হিসাবে চূড়ান্তবর্ষে আবশ্যিকভাবে একটি গবেষণা কর্ম সম্পন্ন করতে হয়। আমি আপনাকে এই গবেষণায় অংশগ্রহণ করার জন্য আমন্ত্রণ জানাচ্ছি। গবেষণার বিষয় হচ্ছে “যৌনতা সম্পর্কে মহিলা স্ট্রোক রোগীদের অভিজ্ঞতা”। এই গবেষণার লক্ষ্য হচ্ছে স্ট্রোকের কারণে মহিলা স্ট্রোক রোগীদের যৌনতা সম্পর্কে অভিজ্ঞতা কিরূপ হয় তা জানতে পারা এবং স্ট্রোকের কারণে মহিলা স্ট্রোক রোগীদের যৌন সমস্যা, যৌন জীবন চালিয়ে যাওয়ার ধরন এবং যৌনতা সম্পর্কে তাদের ধারণা কিরূপ হয় তা বুঝতে পারা।

এই গবেষণায় অংশগ্রহণ সম্পূর্ণ আপনার ইচ্ছাকৃত। আপনি যে কোন সময় আপনার অংশগ্রহণ প্রত্যাহার করতে পারবেন। ইহা আপনার চিকিৎসা সেবায় কোনরূপ ব্যাঘাত ঘটাবে না। গবেষণায় অংশগ্রহণের জন্য কোন উপহারের ব্যবস্থা নাই। আপনি এই গবেষণা থেকে সরাসরি উপকৃত নাও হতে পারেন। তবে গবেষণা থেকে প্রাপ্ত ফলাফল কর্তৃপক্ষকে যৌনতা সম্পর্কে আপনার ধারণা জানতে সাহায্য করবে যা ভবিষ্যতে আপনার মতো অন্য মহিলা রোগীদের যৌনতা সংক্রান্ত সমস্যার সহায়তা প্রদানে সহায়ক হবে।

গবেষণার সাথে সম্পর্কিত কিছু প্রশ্ন নিয়ে আপনার একটি সাক্ষাৎকার নেয়া হবে যা অডিও টেপ দ্বারা সংরক্ষণ করা হবে। আপনার কাছ থেকে প্রাপ্ত তথ্য গোপনীয়তার সাথে রাখা হবে। শুধুমাত্র গবেষক এবং তার তত্ত্বাবধায়ক তথ্য গুলো ব্যবহার করতে পারবেন। আপনার পরিচয় গবেষণার কোথাও প্রকাশ করা হবে না। গবেষণা সংক্রান্ত আপনার যদি কোনরূপ প্রশ্ন থাকে তাহলে আমাকে দ্বিধাহীনভাবে জিজ্ঞাসা করতে পারেন। গবেষণা বিষয়ক সকল প্রশ্নের উত্তর দেবার জন্য আমি সচেষ্ট থাকবো।

.....

কানিজ ফাতেমা

বি.এস.সি ইন ইন অকুপেশনাল থেরাপি বিভাগ, ৪র্থ বর্ষ

বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

সিআরপি, চাপাইন, সাভার, ঢাকা-১৩৪৩।

Appendix 3B

সম্মতিপত্র

এই গবেষণা অকুপেশনাল থেরাপি বিভাগের অধ্যয়নের একটি অংশ এবং গবেষকের নাম কানিজ ফাতেমা । তিনি বাংলাদেশের খেলথ প্রফেশন্স ইনস্টিটিউটের বি.এস.সি ইন অকুপেশনাল থেরাপি বিভাগের ৪র্থ বর্ষে অধ্যয়নরত একজন ছাত্রী এবং তার গবেষণার বিষয় “ যৌনতা সম্পর্কে মহিলা স্টোক রোগীদের অভিজ্ঞতা ” । এই গবেষণায় একজন অংশগ্রহনকারী এবং আমি এই গবেষণার উদ্দেশ্য পরিষ্কারভাবে বুঝতে পেরেছি । আমি যে কোন সময় গবেষণার যে কোন পর্যায়ে আমার অংশগ্রহন প্রত্যাহার করতে পারি । এই জন্য আমি কারো কাছে জবাব দিতে বাধ্য থাকব না । আমি অবগত হয়েছি যে , এই গবেষণার অংশগ্রহন করার ফলে বর্তমানে এবং ভবিষ্যতে আমার চিকিৎসা গ্রহনের উপর কোন প্রভাব পড়বে না । এই গবেষণার সাক্ষাৎকারের সকল তথ্য গুলো গবেষণার কাজে ব্যবহৃত হবে, সেগুলো সম্পূর্ণ ভাবে গোপনীয় থাকবে এবং আমার নাম ও পরিচয় ছাপা হবেনা ।

আমি গবেষণার পদ্ধতি, জটিলতা অথবা সুফলের ব্যাপারে যে কোন প্রশ্নের উত্তর দানের জন্য এই গবেষণার তত্ত্বাবধায়কের সাথে আলোচনা করতে পারব । আমি উপরোক্ত সকল তথ্য সম্পর্কে জানি এবং এই গবেষণায় অংশগ্রহনে সম্মতি জানাচ্ছি ।

অংশগ্রহনকারীর স্বাক্ষর/টিপসইঃ	তারিখ:
গবেষকের স্বাক্ষরঃ	তারিখ:
স্বাক্ষীর স্বাক্ষর/টিপসইঃ	তারিখ:

Appendix 3C

প্রশ্নসমূহ

অগ্রহনকারীর নামঃ

বয়সঃতারিখঃ.....

পূর্বের পেশাঃ..... বর্তমান পেশাঃ

শিক্ষাগত যোগ্যতাঃ.....স্ট্রোকের তারিখঃ

প্রধান যত্নকারী ঃ..... স্ট্রোকের ধরনঃ.....

বসবাসের স্থান / জেলাঃ

দয়া কওে নিচের প্রশ্নগুলোর উত্তর দিন-

১। যৌনতা বলতে আপনি কি বোঝেন ?

২। আপনি কী মনে করেন স্ট্রোকের কারণে আপনার যৌন ক্ষমতায় কোন পরিবর্তন এসেছে ? যদি হ্যাঁ হয় তাহলে দয়া কওে বলেন কি ধরনের সমস্যা লক্ষ্য করেছেন ?

৩। স্ট্রোকের কারণে আপনার যৌনজীবনে কোন সমস্যার সম্মুখীন হচ্ছেন? যদি হ্যাঁ হয় তাহলে দয়া কওে বিস্তারিত বলুন,

৪। স্ট্রোক সংক্রান্ত সমস্যার জন্য আপনি কিভাবে আপনার স্বামীর সাথে যৌনসম্পর্ক স্থাপন করেন?

৫। আপনি কী আপনার স্বামীর সাথে যৌন বিষয়ক সমস্যাগুলো নিয়ে আলোচনা করেছেন? যদি হ্যাঁ হয় তাহলে দয়া করে বিস্তারিত বলুন,

৬। আপনার যৌন সমস্যার কারণে আপনার স্বামী কিভাবে আপনাদের যৌন জীবন চালিয়ে যাচ্ছেন? দয়া কওে বিস্তারিত উল্লেখ করুন,

৭। যৌন জীবন চালিয়ে যাওয়ার জন্য আপনি আপনার স্বামীর কাছ থেকে কি ধরনের সাহায্য আশা করেন?

৮। আপনি কী মনে করেন আপনার যৌন সমস্যার কারণে আপনার এবং আপনার স্বামীর ঘনিষ্ঠতার কোন পরিবর্তন এসেছে? যদি হ্যাঁ হয় তাহলে দয়া করে বিস্তারিত বলুন,

৯। আপনি কী মনে করেন যৌনসম্পর্ক স্থাপনের সমস্যার কারণে আপনার দৈনন্দিন জীবনে কোন প্রভাব পড়ছে? যদি হ্যাঁ হয় তাহলে দয়া করে বিস্তারিত উল্লেখ করুন,

Appendix 4A

Information Sheet

I am Kaniz Fatema, student of the Bangladesh Health Professions Institute (BHPI) is the academic institute of the Centre for the Rehabilitation of the Paralyzed (CRP), Savar, Dhaka. I am studying B.Sc. in Occupational Therapy, (4 year course) under the Occupational Therapy department of BHPI. In regards to the fulfillment of B.Sc. Degree, it is compulsory to conduct a research in 4th year of study. I would like to invite you to take part in my research study and the title is “Experience of female stroke patient about their sexuality”. The aim of the study is to know the experience of female stroke patient about their sexuality. The objective of this study is to understand the sexual problem, way of maintaining sexual life, the perception of female stroke patient about their sexuality.

It is up to you whether or not you want to participate in this study. If you do not wish to take part then there is an opportunity to withdraw your participation at any time. This will not hamper access to services and will not affect the treatment of you. There is no incentive for participation in the study. May be there is no direct benefit for you at present. However, it is very important to know your perception, understanding the way of maintaining sexual life after stroke.

An in-depth interview will be conducted with some questions regarding the study that will be recorded by tape recorder. Confidentiality of all records will be highly maintained and all details will be kept on a confidential database that is only accessible to me and my supervisor. The identity of you not to be disclosed in any presentation or publication without your agreement. If you have any queries regarding this study please feel free to ask. I am accountable to answer all questions regarding this study.

Kaniz Fatema

B. Sc. in Occupational Therapy, 4th year

Department of Occupational Therapy

BHPI, CRP, Chapain, Savar, Dhaka-1343.

Appendix 4B

Consent form

This research is a part of Occupational Therapy course and the name of this researcher is..... She is a student of BHPI in Occupational Therapy in 4th year. The study is entitled as “Experience of female stroke patient about sexuality”.

In this study I amagree to participate and participating voluntarily. The purpose and nature of the study has been explained to me clearly. I will not be bound to answer to anybody and I understand that I can withdraw from the study without repercussions at any time whether before it starts or while I am participating. I understand that it will have no influence on my present or future status as a patient in this clinic. I will receive the same care as any other patient seen in this institution. There will be no penalty or loss of benefits to which I am otherwise entitled. I also understand that all the information collected from interview used in the study would be kept safe and confidentiality. Only researcher will be eligible to assess in the information for her publication. I give permission for my interview with the researcher and I agree to quotation/publication of extracts from my interview. My name and address will not published anywhere in this study. I can consult with researcher and research supervisor about the research process and I am willing to participate in the study with consent.

Signature	Date
Signature/finger print of the participant:	
Signature of the researcher:	
Signature/finger print of the witness:	

Appendix 4C

Questions

Participant's name:.....

Age:Date:.....

Pre morbid occupation:Present occupation:

Educational background: Onset of stroke:

Main caregiver:Nature of stroke:

Living place/district:

Please answer the following question-

1. What do you mean by sexuality?
2. Do you think your sexual ability has been changed due to stroke? If yes, please tell about what type of change that you noticed
3. Do you face any difficulty in your sexual life because of having stroke? If yes, would you please explain in details,
4. In spite of your difficulties, how do you maintain your sexual relation with your husband?
5. Have you shared with your husband about your difficulties regarding sexual activities? would you please explain in details,
6. Would you please mention that how do your husband is adjusting with your limitation to maintain yours sexual life?
7. What type of support do you expect from your husband to maintain yours sexual life?
8. Do you feel your intimacy in between you and your husband has been changed due to having difficulty in sexuality? would you please explain in details,
9. Do you think is there any effect of your difficulties to take part in sexuality in your everyday life?

Appendix 5

Overall information of participants

Participant's information	P1	P2	P3	P4	P5	P6	P7	P8
Age (years)	30	45	45	43	45	35	44	35
Sex	Female	Female	Female	Female	Female	Female	Female	Female
Stroke (type)	Ischemic	Ischemic	Hemorrhagic	Ischemic	Ischemic	Hemorrhagic	Ischemic	Ischemic
Education	SSC	SSC	Not illiterate	Primary	Primary	Not illiterate	Not illiterate	B. com
Occupation	Housewife	Housewife	Housewife	Housewife	Housewife	Housewife	Housewife	Housewife