

**Impact of Dysphagia on Quality of Life after Treatment of Head Neck
Cancer in Bangladesh**

A research presented to the
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APPROVAL

We the under signed certify that we have carefully read and recommended to the Faculty of Medicine, University of Dhaka, for the acceptance of this dissertation entitled-**“Impact of Dysphagia on Quality of Life after Treatment of Head Neck Cancer in Bangladesh”**

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Declaration

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Dedication

To my beloved parents

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ABBREVIATIONS

BHPI: Bangladesh Health Professions Institute

CRP: Centre for the Rehabilitation of the Paralysed

CRT: Chemo radio Therapy

HNC: Head and Neck Cancer

MDADI: M.D. Anderson Dysphagia Inventory

NICRH: National Institute of Cancer Research and Hospital

PES: Pharyngo Esophageal Segment

QOL: Quality Of Life

SLT: Speech & Language Therapy

SPSS: Statistical Package for Social Science

VHI: Voice Handicap Index

EXECUTIVE SUMMARY

Title: Impact of Dysphagia on Quality of Life after Treatment of Head Neck Cancer in Bangladesh.

The aim of the study is to find out the impact of dysphagia on quality of life among the people with head and neck cancer following radiotherapy, chemotherapy and chemoradiotherapy in specialized hospital in Bangladesh. To know the functional, physical and emotional impacts of dysphagia on quality of life.

The study is based on a quantitative type of cross sectional survey design paradigm. 10 samples were selected using a purposive (non-probability) sampling technique in accordance with the inclusion and exclusion criteria. Bangla translated M.D.Anderson Dysphagia Inventory (MDADI) questionnaire was used for data collection. Data was analysed by Descriptive statistics and presented in a table and bar graph.

In this study investigator identified that most of the people with dysphagia had difficulties in emotional and physical areas. According to this study maximum number of participants had difficulties in functional area. 60% of participants mentioned that they feel embarrassed for their swallowing problem. 90% of participants told that they have low self-esteem because of their swallowing problem. 50% of participants stated about their impact on day to day activities. 50% of participants reported that swallowing problems limit social and personal life. 60% of participants mentioned that they limit their food intake because of their swallowing difficulty. The findings with this small group of people with severe dysphagia after taking chemo radio therapy treatment of HNC suggest that their quality of life is severely compromised. Swallowing is the most important concern in human life to live a sound life. Sometimes this swallowing process becomes difficult and hard to survive. Swallowing related quality of life and the aspects of QOL related to emotional area, functional area and physical area are significantly worse of people with head and neck cancer. Speech & Language Therapist can improve the quality of life through exploring the underlying fact of those types of patients who suffer from swallowing problem.

Keywords: Dysphagia, Head & Neck Cancer (HNC), Treatment of Head & Neck Cancer, Quality of life (QOL)

1.1 Introduction

Dysphagia, derived from the Greek *phagein*, meaning "to eat," is a common symptom of head and neck cancer and can be unfortunate sequelae of its treatment. Dysphagia is a very common complaint of head and neck cancer patients and can exist before, during, and after chemoradiotherapy (American Speech-Language-Hearing Association, 2014). According to Gaziano (2002), it leads to nutritional deficiency, weight loss and prolonged unnatural feeding and also has a major potential risk for aspiration. This has a major potential risk for aspiration. This has significant effect on patient's entire quality of life. Because treatment of Dysphagia in this setting is rarely effective, prevention is paramount. Several strategies have been developed to reduce Dysphagia. These include swallowing exercise, modification techniques such as intensity-modulated radiotherapy, selective delineation of elective nodes, reducing xerostomia by parotid sparing radiotherapy and adding of radio protectors. According to Platteaux (2009), Head & Neck Cancer (HNC) is the sixth most common malignancy in the world, at present representing about 6% of all tumors and accounting for an estimated 650,000 new cases and 350,000 deaths every year worldwide. Approximately 30-40% of all HNC patients present with early stage disease, which is treated by surgery or primary radiotherapy. Around 60% of HNC patients are diagnosed with a locally advanced stage, which is associated with poor prognosis. Standard treatment for locally advanced head neck cancer has been surgery followed by prospective radiotherapy (RT). Therefore, concurrent radiotherapy with chemotherapy (CRT) is nowadays accepted as an organ-preserving approach (Nguyen, Smith, & Sallah, 2007). The most common acute and chronic side effect of CRT for head neck cancer are mucositis, pain, dermatitis, xerostomia, loss of taste, hoarseness, weight loss, myelosuppression, nausea and Dysphagia (Gaziano, 2002). According to Nguyen (2002), Dysphagia is a common, multifactorial and potentially life-threatening side effect of CRT, with potential for aspiration and death due to aspiration pneumonia. It also results in nutritional deficiency leading to weight loss and the need for prolonged feeding by a percutaneous endoscopic gastrostomy (PEG) tube. This has significant impact on the global quality of life (QOL) of potentially cured patients, causing anxiety and depression (Nguyen et al., 2005).

Speech & Language Therapy still a new profession in Bangladesh. Head and neck cancer is one of the areas where Speech & Language Therapist can work. As literature suggest that Dysphagia is one of the major complication of head neck cancer patient but there is no any available data in Bangladesh about feature and the impact of dysphagia on their quality of life among the head and neck patients. So, the core task of this study was to identify the impact of dysphagia on quality of life after treatment of head and neck cancer.

1.2 Background and Literature Review

Head and neck cancer refers to a group of cancers originating in the lips, tongue, oral and nasopharynx, paranasal sinuses, pharynx and larynx. The common of head and neck cancers are squamous cell carcinomas that are malignant tumors of squamous epithelium (mucosal lining) of the aforementioned regions (Longemann, 1998). The primary risk factors associated with head and neck cancers include tobacco, heavy alcohol consumption, mechanical irritation and poor oral hygiene (Crary & Groher, 2003).

Studies have shown CRT to be successful in improving locoregional control, disease free survival and overall survival (Pignon et al., 2009). The significant aim of organ preservation therapy is cancer treatment with retention of healthy tissue, allowing for the maintenance of normal mechanisms for breathing, deglutition, and communication (Pignon et al., 2000). As the number of patients receiving CRT continues to increase it is important to pay careful attention to the long-term quality of life (QOL) issues affecting this population (Francis et al., 2010). Dysphagia is the most common QOL issue in CRT patients and has been observed to affect up to 50% to 64% of patients after CRT (Nguyen et al., 2002). Dysphagia can have serious social implications. People with feeding and swallowing difficulties often limit their participation in daily activities. Modified diets not only restricted on daily life for these patients (Ekberg et al., 2002) but also place a heavy financial burden on the health care system. Taken together, functional outcomes following CRT intervention of head and neck cancer can have significant consequences related to health and nutrition as well as social function and overall quality of life for these patients. According to Bhattacharjee et al., (2011), In India, Head neck cancer accounts for 30-40% cancers at all sites, out of which 9.4% being oral cancers. In South East Asia 40% of head and neck cancer cases are occurred out of total head and neck cancer occurrence. In Bangladesh there are about 1 million cancer patients, 30% of these patients are ENT related. (“The burden of cancer in Asia”, 2013) Mouth and tongue cancers are common in the India subcontinent, nasopharyngeal cancer is more common in Hong Kong and pharyngeal and/or laryngeal cancers are more

common in the other population. A study was conducted by Barbara, Murphy, and Gilbert,(2009) they found that HNC patients undergoing chemoradiation are at high risk for acute and late-effect Dysphagia. According to Mayer (2005), The diagnosis and treatment of head and neck cancer has profound implication for the individual living with the disease. As Gotay& Moore (1992) aptly stated, “Head and neck cancer strikes at the most basic of human function-the abilities of communicate, eat, and interact socially” For this reason, quality of life (QOL) has traditionally been of inherent fundamental importance in the field of speech-language therapy. As the speech-language therapist and other multidisciplinary team members incorporate the QOL concepts into clinical practice, professional intervention efforts will improve and health care providers can indeed claim that they can improve the QOL of individuals living with head neck cancer (Mayer, 2005).

Curran et al. (2007) found poor functional and emotional wellbeing from 424 patients with head and neck cancer in a study. Most of the patients were have less social contact with their family friends and they felt isolation from society. Dirix, Nuyts and Bogaert (2006) reported from survey of 65 patients where pain was common (58.4%) and interfered with daily activities in 30.8% of patients. More than half of the patients (58.3%) had mood complaints, and 60% had interference by their physical condition on their social activities and also most of them were fulfill their work either themselves or through others. Lin, Starmer and Gourin (2012) reported that head and neck cancer patients experience one of the highest rates of depression which affects quality of life, treatment compliance, disease progression, pain tolerance, and increase the risk of suicide.

Another study was conducted by (Renata, Pamella, & Isabel, 2013) this study shows that speech therapy should maintain a presence in the teams, to then guide the rehabilitation of organic dysphonia and Dysphagia possibly affecting patients after cancer treatment with radiation therapy and chemotherapy. Some another study has been done by Parvez (2010) in this study researcher explored the prevalence of speech handicap among the head neck cancer patient. Mridha (2011) in this study researcher suggest that VHI can be considered as a useful treatment in treatment of the radiation induced voice problems head neck cancer patient. So several studies has been done on different complication of head and neck cancer. But investigator did not found any study on the impact of Dysphagia on quality of life after treatment head and neck cancer. Through this study investigator tried to find out the impact of dysphagia on quality of life in the patients with head and neck cancer.

1.3 Justification of the study

Head and Neck Cancer in Bangladesh is particularly a critical disease condition because of poverty, illiteracy and other disease associated with poor nutrition and lack of basic knowledge of people about health matters. The complications after treatment of head and neck cancer affect the person's more seriously and speech and swallowing problems are most important complications, because these are the most basic human function (Yamaguchi University Graduate School of Medicine 2006). Speech and language therapists are often involved with multi-professional team. Head and Neck Cancer is remediate the communication and swallowing problems manifested as adverse effects of surgery, radiotherapy or chemotherapy on normal communication and swallowing function. In Bangladesh many head and neck cancer patients are suffering different complications including swallowing difficulties and impact on their life after completing treatment (chemotherapy, radiotherapy) but investigator did not find any data which explain the impact of Dysphagia on quality of life among the patients who treated for head and neck cancers in Bangladesh. This study aims to address this impact of dysphagia on quality of life. This study can help the therapist to aware about the impact of dysphagia in patient's life. This study can help different organizations to work in this area for include speech therapy service in their program for deliver a comprehensive treatment service. Thus the study might create a future prospect of Speech & Language Therapy profession in Bangladesh.

1.4 Operational Definitions:

Dysphagia: Dysphagia is a medical term used to describe a swallowing disorder. Dysphagia is the inability to swallow safely or efficiently. It can lead to weight loss, malnutrition, and aspiration and its related complications. Swallowing problem primarily associated with disease of esophagus. The term Dysphagia may refer to a swallowing disorder involving any one of the three stages of swallowing: Oral, Pharyngeal or esophageal (Logemann, 1993).

In this study dysphagia used to focus on patients who are suffering from dysphagia after taking treatment of head & neck cancer.

Treatment of Head & Neck Cancer:

Head and neck tumors are squamous cell carcinomas (National head & neck cancer audit, 2011) and one of the major health complication which can involve many different structures, which includes epithelial malignancies of the upper aerodigestive tract, such as the paranasal sinuses, nasal cavity, pharynx, and larynx (Cognetti, Weber and Lai, 2008). Treatment of

patients with head neck squamous cell carcinoma may involve radiotherapy, Chemotherapy, and surgery (Langendijk et al., 2008). Investigator used treatment of head and neck cancer because the aim of this study is to know about the impact of dysphagia on quality of life after taking treatment of head and neck cancer.

Quality of Life: The definition of quality of life is different for everyone. The main thing that determines quality of life is our ability to enjoy all that life has to offer (David, 1996). The term quality of life (QOL) references the general well-being of individuals and societies. Instead, standard indicators of the quality of life include not only wealth and employment, but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging. (Nussbaum&Sen, 1993)

In this study the term ‘Quality of Life’ was used. Investigator focused on those people who face problems in functionally, emotionally and physically in their daily life. In this study investigator evaluated the quality of life (emotional impact, functional impact and physical impact) people with dysphagia.

1.5 Aim

The aim of the study was to find out the impact of dysphagia on quality of life among the people with head and neck cancer following radiotherapy, chemotherapy and chemoradiotherapy.

1.6 Objectives

- To identify the functional impact of Dysphagia on quality of life.
- To identify the physical impact of Dysphagia on quality of life.
- To identify the emotional impact of Dysphagia on quality of life.

2.1 Study design

In this study investigator was keen to find out the impact of dysphagia on quality of life after taking treatment of head and neck cancer. In this study the quantitative type of cross sectional survey design was used to identify the quality of life and collected information from participants at one point of time. There was another reason for choosing the cross-sectional survey because cross-sectional survey is less expensive (Depoy and Gitlin, 1998). Investigator evaluates the quality of life (functional, physical and emotional) people with dysphagia by questionnaires.

2.2 Study Population

In this study population were the people with dysphagia those who were diagnosed with head & neck cancer treated by radiotherapy, chemotherapy or chemoradiotherapy. Only these population groups was selected as investigators aim is to explore the quality of life of dysphagia patient after HNC treatment.

2.3 Study Place

This study was conducted in National Institute of Cancer Research and Hospital (NICRH) Mohakhali, Dhaka & Delta medical College, Dhaka. Both of these the hospital has separated radiation oncology department and a number of the patients were come from different regions of the country with different conditions.

2.4 Sample Size

The participants were selected those who were diagnosed with head neck cancer and dysphagia. A sample represents part of population and it's not possible to include the whole population which will present the population (Hannan,2007). Ten (10) subjects were selected from total population of patients with head neck cancer and dysphagia.

2.5 Sampling Procedure

In this study the sample was selected through purposive sampling procedure to accomplish the aim and objective. The purposive sampling was used as its comparatively easy, cost effective and quickest sampling method (Bailey, 1997). Investigator was very concern to avoid the sample selection bias through ensuring predefined inclusion and exclusion criteria.

3.6 Inclusion Criteria

- Patient received Chemotherapy, Radiotherapy, or Chemoradiotherapy.
- Irradiated surviving adult (≥ 18 years) patients at least 6 months removed from treatment.
- Both male and female patients were selected.
- Patient who were willing to participate.

3.7 Exclusion Criteria

- History of dysphagia as disease process before receiving RT CT or CRT.
- If a patient had history of surgery in head neck region.
- Patients with neurological deficits (e.g. Stroke, neurodegenerative disease).
- Subjects who were unwilling to participant in this study were excluded.

3.8 Reason for inclusion exclusion criteria

3.8.1 Inclusion Criteria

Swallowing continues to evolve during the first 6-12 months post therapy because of the delayed effects of radiation therapy, which include gradual fibrosis of the pharyngeal muscles and soft tissues. The 6 months' time period was chosen to maximize potential recruitment while allowing for the effect of delayed fibrosis to became manifest (Pauloski et al., 1994). Quality of life (functional, physical & emotional) of adult (≥ 18 years) and child (≤ 18 years) are different.

3.8.2 Exclusion Criteria

Many disorders in central nervous system may effect in oral and pharyngeal dysphagia and this cause may influence patient quality of life in a degenerative way. Investigator excluded HNC surgical conditioned patient because this also influence the quality of life in worsen way. Investigator also mentioned that history dysphagia as a disease process was excluded because this may make confused to collects data and the main objective is that quality of life people head & neck cancer with dysphagia after taking chemoradiotherapy.

3.9 Data Collection Tool

Investigator collected data using a set questionnaire developed by M.D. Anderson Dysphagia Inventory (MDADI). According to Chen et al., (2001) the MDADI is the first validated and reliable self-administrated questionnaire designed specifically for evaluating the impact of dysphagia on the quality of life of patients with head and neck cancer. Gillespie et al. (2009), Said that- M.D. Anderson Dysphagia Inventory is an effective method of assessing patient perception of Dysphagia related QOL. As MDADI is English questionnaire so investigator translated it with forward and backward translation system by independent translator. Investigator used in bangla because the bangla version of question is more easier to understand for the participants and the questionnaire is very accepted and very helpful technique of data collation in health professions (Hicks,2005). Each response is rated by the patient from 1 to 5 on a scale, with 1 described as “Strongly agree” and 5 described as “strongly disagree”. Scores are calculated separately for each domain. Higher scores for the scales and subscales indicate better quality of life (Webster, Cella and Yost, 2003). Investigator used bangla demographic questions with translated MDADI questionnaire and the permission form and consent forms for data collection.

3.10 Data Collection Procedure

Investigator collected data from the participants through face to face interview. Investigator clarified that the participant had the right to refuse to answer of question during completing questionnaire. Investigator clarified to all participants about the aim of the study. Participants was ensured that any personal information will not be published anywhere. Investigator took permission from each volunteer participant by using a written consent form. Investigator requested to the carer of illiterate participants to sign in consent form. Literate participants filled up the form by themselves. For the illiterate participants, investigator read the MDADI questionnaire and filled it up according to their response. After getting consent from the participants, demographic information with bangla translated MDADI questionnaire was used to identify the impact of dysphagia among the people with head and neck cancer.

2.11 Data analysis

Investigator used descriptive statistics for data analysis. Because descriptive statistics are commonly used to make sense of survey data (Hicks,2000). Bailey (1997) suggested that descriptive statistics are those that describe, organize, and summarize data. It includes such things as frequencies, percentages, description of central tendency and descriptions of relative position. Investigator used this technique because the aim of the study is to identify the impact of dysphagia on quality of life the patients treated with head and neck cancer and investigator showed the result easily through descriptive statistics.

2.12 Ethical consideration

At first the investigator took permission from ethical committee of Bangladesh Health Professions Institute (BHPI). Permission was taken from mentioned study place. Investigator informed all participants' career about the purpose of the study before data collection. Investigator took participants' consent by using consent form. For illiterate participants, investigator read out the consent form. Then interview was conducted in safe and comfortable place where the participants feel secured. Investigator kept all the information and participants' personal identity in confidential. Participants' careers were informed that they would not get harm. Participants assured that they have right to withdraw themselves at any time from the study. Information was shared with the supervisor.

3.1 Demographic Information

In order to conduct the study the investigator collected the demographic information to interpret the data that included in the findings. The main objective of this study was to find out the impact of Dysphagia in quality of life after taking chemo radiotherapy of people with head neck cancer.

After completing the statistical analysis of the data, the investigator found the mean differences in the evaluation area of global, emotional, functional and physical impact. In this chapter, the numerical outcome of the study was described statistically by the use of descriptive statistics (mean). Demographic data of the participants and the findings of the study in different target areas are also presented in this chapter by using table and bar chart.

In the following table demographic data of the participants is presented:

Gender		Age	Percentage & Number of participant's	Occupation	Percentage & Number of participant's
Male	70%	Below 30 years	10% (1)	Student	10% (1)
Female	30%	31-40 years	10% (1)	Business man	40% (4)
		41-50 years	30% (3)	Job Holder	10% (1)
		51-60 years	40% (4)	Farmer	20% (2)
		61-70 years	10% (1)	House-wife	20% (2)

Table 1: Demographic information of the participants

Among 100% (10) participants the numbers of male participant were 70% (7) and female participants were 30% (3). Besides that the age range below 30 years 10% (1) participants, 31 to 40 years 10% (1) participants and 61 to 70 years 10% (1) participants were presented in this study. In occupation area 40% (4) of the participants were businessman, 20% (2) were farmer, 20% (2) were housewife, 10% (1) were job holder and 10% (1) of participants were student.

3.2 Emotional Impact

Investigator found the emotional impact on quality of life of dysphagia patients. Emotional impacts were evaluated in different sub area of this skill.

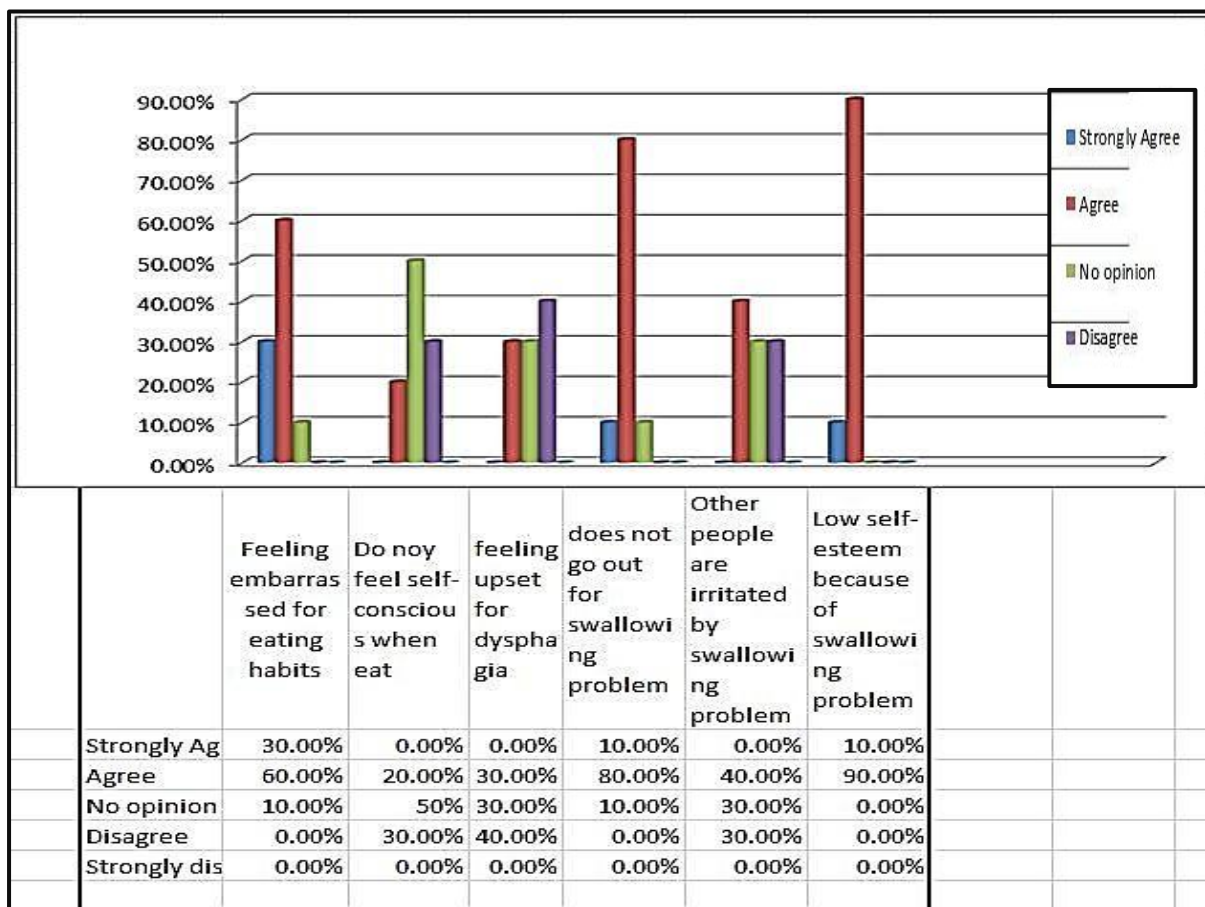


Figure – 3.2: Emotional Impact on quality of life

The graph shows that majority of the participants (60%) respond that they feeling embarrassed for eating habits. Most of the participants (50%) answered that they don't feel self-conscious when eat. The highest 80% participants reported that they does not go out for their swallowing problem. In case of feeling upset for dysphagia 40% of participants disagreed whereas 30% of participants were agreed. Most of the participants 40% respond that other people were irritated by swallowing problem. Majority of the participants 90% were experienced low self-esteem because of swallowing problem.

3.3 Functional Impact

Investigator found the functional impact on quality of life of dysphagia patients. Functional impacts were evaluated in different sub area of this skill.

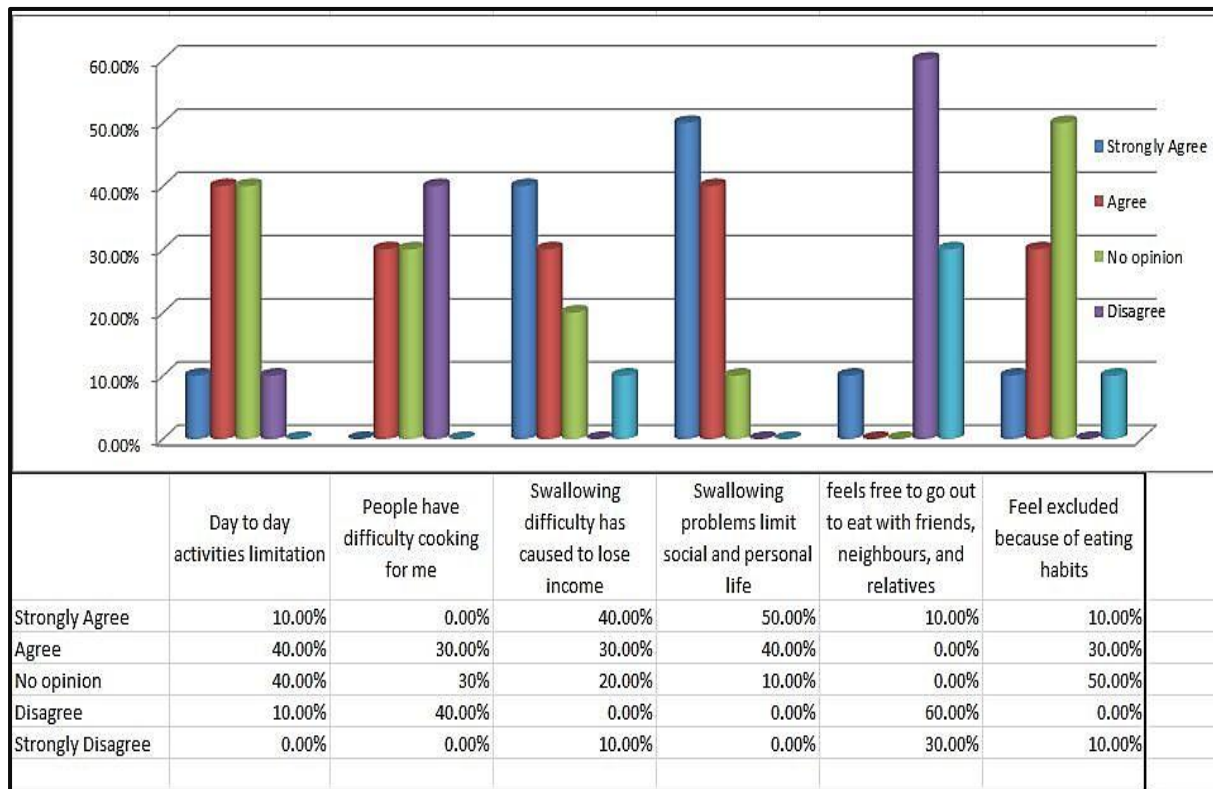


Figure – 3.3: Functional Impact on quality of life

Out of 10 participants, majority of them (40%) were respond that their day to day activity become limited. 40% of participants were disagreed that other people have difficulty to cook for them whereas 30% of participants were agreed in this instance. Most of the participants (40%) were strongly agreed that their swallowing difficulty has caused to lose income. Majority of participants 50% were reported that swallowing problems limit their social and personal life. On the other hand 60% of participants were disagreed to that they feel free to go out to eat with friends, neighbors, and relatives. In term of feeling excluded for eating habits 50% of participants had no opinion whereas 30% of participants were agreed in this instance.

3.4 Physical Impact

Investigator evaluated the physical impact on quality of life of dysphagia patients. Physical impacts were assessed in different sub area of this skill. The findings of this skill are described as follow:

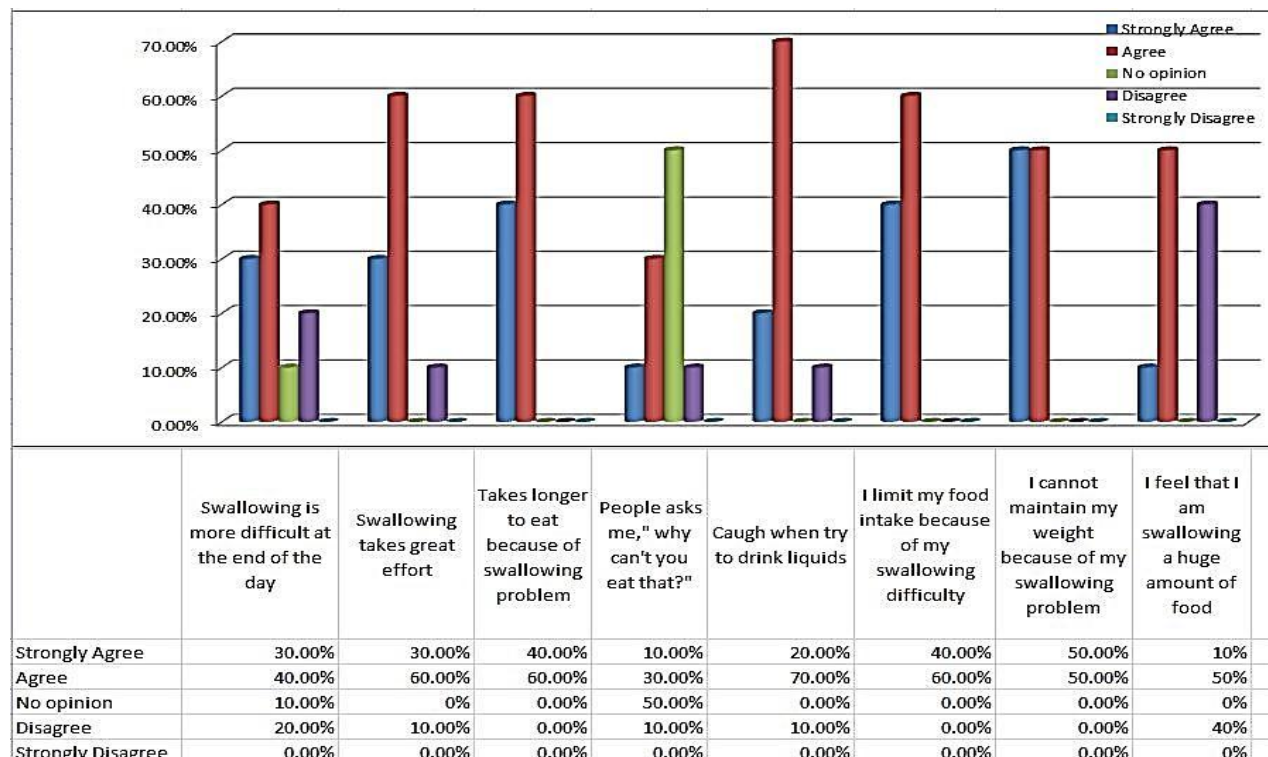


Figure – 3.2: Physical Impact on quality of life

The graph demonstrates that most of the participants 40% were agreed that their swallowing is more difficult at the end of the day. Majority of the participants 60% answered that their swallowing takes great effort. The highest 60% of participants were agreed that their swallowing takes longer to eat because of their dysphagia. 50% of participants had no opinion in case of other people asking why they can't eat that. Majority of the participants 70% were agreed that they cough when try to drink liquids. Most of the participants 60% were answered that they limit their food intake because of swallowing difficulty. Majority of participants 50% were agreed that they cannot maintain their weight for their swallowing problem. Most of the participants 50% were agreed that they feel that they swallowing a huge amount of food at a time.

4.1 Emotional Impact

The study has identified the emotional impact on quality of life of the patient with head and neck cancer. The data collection tool MDADI contains seven emotional questions that all has been filled out by the participants where it shows highest percentage of agreement 60% in case of embarrassed for their swallowing problem. Besides that 10% of participants have no opinion where as 30% of participants were strongly agreed in this instance. According to Lazarus et al. (1993) Swallowing is one of the most common incidences in case of CRT which may create a relatively temporary or permanent in some cases. According to Mayers (2005) has found that the swallowing problem has a greater chance to initiate the personal embarrassment may contribute negatively in everyday social life. In these circumstances the investigator already found that the 60% of the participants were agreed and 30% were strongly agreed to have the experience of embarrassment due to dysphagia that could initiate a poor quality of life of the participants.

On the other hand, highest percentage of no opinion 50% in incident of not feels self-conscious. As well 30% of participants were disagreed while 20% of participants were agreed. According to Myers (2005) Individuals with head & neck cancers are at high risk for psychosocial problems. In these grades the investigator already showed that highest number of participants has no opinion and 30% of them were disagreed but 20% participants were agreed that they do not feel self-conscious when they eat.

Investigator found that highest percentage of disagreed 40% in case of feel upset. In addition 30% of participants have no opinion then 30% of participants were agreed. According to Baile et al. (1992) found that depression was equally distributed irrespective of tumour stage in head & neck cancer patients. According to Logemann (1997) noted that 3 to 4 weeks into receiving CRT treatment patient may suffer depression. In these conditions investigator even now showed that 30% of participants were agreed while 40% were disagreed and 30% of participants have no opinion in this instance.

Investigator also found that among the number of 10 participants highest percentage of agreement 80% in case of does not go out for their eating problem. As well 10% of participants were strongly agreed but 10% of participants have no opinion regards this

question. According to Ackerstaff et al.(2002) patients with head neck cancer after taking chemo radiotherapy experience wide range of psychological difficulties. According to Baylor, Yorkston, &Eadie (2003) often observed that those who were suffer from HNC and dysphagia feels isolated. Investigator already found that 80% of participants were agreed that do not go out for their eating problems.

It also shows that highest percentage of agreement 40% that they were irritated by swallowing problem. But 30% of participants were disagreed and 30% of participants have no opinion in this question. According to Wen & Gustafson (2004) after treatment individuals with HNC experienced stress which in turn increase then affects the person's quality of life and social well-being. Investigator already found that 40% of participants were irritated by their swallowing problem while 30% of participants were disagreed besides 30% of participants have no opinion in this question.

Investigator also showed that highest percentage of agreement 90% in case of low self-esteem whereas 10% of participants were strongly agreed in this instance. As investigator already mentioned that patient's with head and neck cancer are at high risk of psychosocial problem. Majority of participants 90% were agreed that they have low self-esteem for their swallowing problem and 10% of participants were strongly agreed with this response.

Investigator found that in emotional impact most of the participants 60% were agreed whereas 30% of participants were strongly agreed that they feel embarrassed for their swallowing problem, 20% of participants were agreed that they do not feel self-conscious when they eat, 30% of participants were agreed that they feel upset for their eating habit. Among 100% (10) participants 80% of participants were agreed that they do not go out for their eating problems whereas 40% of participants were agreed that they were irritated by their swallowing problem. Most of the participants 90% were agreed that they have low self-esteem for their swallowing problem. Health-related quality of life (HRQL) reflects the impact of a health state on a person's ability to lead a fulfilling life (Bullinger et al. 1993). It incorporates the individual's perception of and satisfaction with his/her physical, mental/emotional, family and social functioning (Berzon et al. 1993).

4.2 Functional Impact

In functional impact part it showed that highest percentage of agreement 40% in case of their impact on day to day activities. While 10% of participants were strongly agreed but 40% of participants have no opinion and 10% of participants were disagreed in this instance. According to Nguyen et al. (2005) conducted a swallowing related quality of life survey and found that limitation in day-to-day activities brings impact on functional life of a person. As investigator already found that highest numbers of participants were agreed and 10% of participants were strongly agreed that swallowing have impact on their day to day activities.

Among these entire participants highest percentage of disagreement 40% in case of other people face difficulty to cook for them. Whereas 30% of participants have no opinion but 30% of participants were agreed that other people face difficulty to cook for them. According to Rieker, Clark,&Fogelberg (1992) family member differed significantly from patients in their perception of quality care. So investigator found that 40% of participants were disagreed that other people have difficulty to cook for them but 30% of participants have no opinion and 30% of participants were agreed in this instance.

Investigator also showed that highest percentage of strongly agreement 40% that swallowing difficulty has caused to lose income. Where 30% of participants were agreed but 20% of participants have no opinion and 10% of participants were strongly disagreed for this question. According to Myers (2005) As HNC patients feel isolated and frequently do not like to go out so that their economic condition severely compromised. So here highest numbers of participants were strongly agreed and 30% of participants were agreed that swallowing difficulty has caused to lose income but 20% of participants have no opinion and 10% of participants were strongly disagreed with this question.

On the other hand, highest percentage of strongly agreement 50% in case of swallowing problems limits social and personal life. As well 40% of participants were agreed but 10% of participants have no opinion in this case. As investigator already mentioned that dysphagia had a severe impact on emotional area and it also limit their personal life as well as effects on their social life. Most of the participants 50% were strongly agreed and 40% of participants were agreed that swallowing limits their personal life.

In this question participants showed that highest percentage of disagreement 60% in case of do not feel free to go out to eat with friends, neighbour and relatives. Whereas 30% of participants were strongly disagreed but 10% of participants were strongly agreed in this instance. According to McQuellon and Hurt (1997) noted that the patient most at risk for psychological disturbance has some psychiatric comorbidity such as poor social and family

network and poorly differentiated coping skills. According to Nguyen et al.(2005) dysphagia patients are riot and loss their confidence to eat. As investigator mentioned that highest numbers of participants were disagreed that they does not feel free to go out to eat with friends, neighbours and relatives. As 30% of participants were strongly agreed but 10% of participants were strongly disagreed with this question.

Finally in functional part result showed that highest percentage of no opinion were 50% in case of feeling excluded for their eating habits. As 30% of participants were agreed and 10% of participants were strongly agreed in this instance. Renata, Pamella, & Isabel (2013) concluded that swallowing difficulty could negatively influence in functional of life of patients after treatment for nasopharyngeal carcinoma. As investigator already presented test number of participants have no that highest number of participants have no opinion but 30% of participants were agreed and 10% of participants were strongly agreed in this instance.

Investigator identified the impact of dysphagia on functional area of quality of life. Among 100% (10) participants 40% of participants were agreed that swallowing had an impact on their day to day activities. Most of the participants 30% were agreed that other people face difficulty to cook for them. 40% of participants were agreed that swallowing difficulty has caused to lose income. Majority of the participants 50% were strongly agreed that swallowing problem limits social and personal life. On the other hand, 60% of participants were disagreed that they feel free to go out with friends, neighbours and relatives. Besides that 30% of participants were agreed that they feel excluded for their eating habits. According to Mayer (2005) after taking treatment of head & neck cancer people with dysphagia has a wide variation in the experience of their difficulties in day to day activities and daily life. So from this finding investigator can conclude that in functional area dysphagia people had a different experience and their quality of life has compromised.

4.3 Physical Impact

Quality of life is one of the important factors for people with dysphagia. Result showed that highest percentage of agreement 40% in case of their swallowing is more difficult at the end of the day. Whereas 30% of participants were strongly agreed but 10% of participants have no opinion and 20% of participants were disagreed in this case. According to Mayer (2005) Multitude of physical symptoms potentially may be experienced by the person with head and neck cancer.

So there investigator already mentioned that highest number of participants are agreed and 30% of participants were strongly agreed that their swallowing is more difficult at the end of the day. But 10% have no opinion then 20% of participants were disagreed with this problem. Highest numbers of participants were agreeing that their swallowing is more difficult at the end of the day. Among this entire participants 30% of participants were strongly agreed, 40% of participants were agreed, 10% of participants were disagreed and none of them are strongly disagreed that their swallowing takes great effort. According to Nguyen et al. (2005) people with head and neck cancer within 4 to 5 weeks of starting therapy patients develop mucositis, radiation dermatitis, and oedema of the soft tissues and their swallowing become more difficult. As investigator already mentioned that 30% of participants were strongly agreed and 40% of participants were agreed that their swallowing is more difficult at the end of the day.

Among 100% (10) participants 10% of participants were strongly agreed, 30% of participants were agreed, 50% of participants have no opinion and 10% of participants were disagreed that other people asked them why they can't eat that. As investigator already mentioned that HNC patient after taking chemo radiotherapy experienced different kind of psychosocial problem and they faced different question in their circumstances. Among these 10 participants 20% of participants were strongly agreed, 70% of participants were agreed and 10% of participants were disagreed that cough when try to drink liquids. From all of this participants 40% of participants were strongly agreed, 60% of participants were agreed and none of them are disagreed and strongly disagreed that they limit their food intake because of their swallowing difficulty. According to Nguyen (2002) from different modalities of complications in HNC people suffer much while limit in their food consumption occurs.

No one was disagreed that they cannot maintain their weight because of their swallowing problem. 50% of participants were strongly agreed, 50% of participants were agreed that they cannot maintain their weight because of their swallowing problem. Among all of these participants 10% of participants were strongly agreed, 50% of participants were agreed, 40% of participants were disagreed that they are swallowing a huge amount of food. Swallowing problem brings negative impact on their physical area. According to Lewin (1999) after treatment HNC people loss their sense of test and smell to some degree also changes in the procedure for emergency resuscitation in the event of cardiac or respiratory arrest.

Investigator found the result of physical impact of dysphagia on quality of life after taking treatment of head and neck cancer the results are following. Most of the people 40% were agreed that their swallowing is more difficult at the end of the day. 40% of participants were

agreed that swallowing takes great effort. Among 100% of participants 30% of participants were responding that other people asked them why they can't eat that. Majority of the participants 70% were agreed that they cough when they drink liquids. Most of the participants 50% were agreed that they swallowing a huge amount of food at a time. After all of this finding investigator conclude that in physical area the complication are differ from one another.

In this study investigator identifies the emotional impact, functional impact and physical impact in quality of life of patient with dysphagia after treatment of head & neck cancer. According to findings dysphagia has negative impact on quality of life. Vartanian et al. (2004) concluded that swallowing difficulty had negatively influence the quality of life of patients after treatment head neck cancer.

The investigator found some limitations of the study though out the study period in different aspects. The investigator found the limitations in finding the recent literature on head and neck cancer related to chemo radiotherapy as the area of the study not very common besides that the number of participants also contribute some limitations as in local country the people are not regular in follow up for poor socio economic condition. On the other hand the literacy of the participant also contribute to the miss rating of the presenting condition of an individual, even sometime the patient face challenge to understand the questions where multiple repetition and asking for rephrasing. Standard Bangla language has been used to translate the questioner but sometimes the country site participants struggle to understand the words. The duration of data collection is also a challenge because of limited availability of the participant in given time.

Findings of this study will be supportive in several perspectives. This will be helpful for the people with dysphagia, their family, SLTs and other professional. SLTs will be able to know about the areas of emotional impact, physical impact and physical impact in people with dysphagia after taking CRT treatment of people with HNC. It will be helpful for SLTs to make plan for the intervention of people with dysphagia. This study will draw attention of the other professionals about the impact of dysphagia in quality of life after taking CRT of people with HNC. Other professionals will be able to know about the importance of Speech and Language Therapy in this field. This study will help Speech and Language Therapy students in their study. They will be able to know the impact of dysphagia in quality of life after taking CRT treatment of people with HNC. Students will be able to gain some basic concepts about the further study about people with dysphagia.

By conducting this study the investigator found result about the quality of life people with dysphagia. But following things could be done in future including speech therapy services in different organization those were working in this area for in their program to delivering s comprehensive treatment services. As the consequence of the study, another study should be done with large number of participants so that the result can be generalized for patients with dysphagia after taking treatment in Bangladesh. As far investigator knows this was first ever study of swallowing related quality of life among people with dysphagia after taking treatment of HNC conducted in Bangladesh. Randomization and large number of participants are recommended for further study. The sample could be collected from more different places. Further study could be conducted swallowing and speech therapy after definitive treatment for laryngeal cancer.

People with dysphagia may impact in their quality of life like emotional area, functional area and physical area. The major findings of this study were based on emotional impact, functional impact and physical impact. Among all people with dysphagia after treatment of head neck cancer affected their quality of life. In this study investigator identified that most of the people with dysphagia had difficulties in emotional and physical areas. According to this study maximum number of participants had difficulties in functional area. The findings with this small group of people with severe dysphagia after taking CRT treatment of HNC suggest that their quality of life is severely compromised. Overall, swallowing related quality of life and aspects of QOL related to emotional area, functional area and physical area are significantly worse of people with head and neck cancer. The Speech & Language Therapist has a greater role in the head and neck cancer specialist team that helps the person with dysphagia to improving their quality of life. Differently with change and thus are likely to have different outcomes in living successfully with the changes brought about by dysphagia.

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ANNEXURE

Annexure: I Questionnaire

Swallowing Related Quality of Life

Patient' name:	Age:	Sex:
Diagnosis:		Type of treatment:
Mobile no. :		Date:

Questionnaire

1. My swallowing ability limits my day-to-day activities.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
2. E2. I am embarrassed by my eating habits.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
3. F1. People have difficulty cooking for me.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
4. P2. Swallowing is more difficult at the end of the day.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
5. *E7. I do not feel self-conscious when I eat.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
6. E4. I am upset by my swallowing problem.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
7. P6. Swallowing takes great effort.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
8. E5. I do not go out because of my swallowing problem.
Strongly Agree Agree No Opinion Disagree Strongly Disagree

9. F5. My swallowing difficulty has caused me to lose income.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
10. P7. It takes me longer to eat because of my swallowing problem.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
11. P3. People ask me, "Why can't you eat that?"
Strongly Agree Agree No Opinion Disagree Strongly Disagree
12. E3. Other people are irritated by my eating problem.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
13. P8. I cough when I try to drink liquids.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
14. F3. My swallowing problems limit my social and personal life.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
15. *F2. I feel free to go out to eat with my friends, neighbors, and relatives.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
16. P5. I limit my food intake because of my swallowing difficulty.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
17. P1. I cannot maintain my weight because of my swallowing problem.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
18. E6. I have low self-esteem because of my swallowing problem.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
19. P4. I feel that I am swallowing a huge amount of food.
Strongly Agree Agree No Opinion Disagree Strongly Disagree
20. F4. I feel excluded because of my eating habits.
Strongly Agree Agree No Opinion Disagree Strongly Disagree

উ৫. খাবারগ্রহণের সমস্যার কারণে আমি বাইরে যাই না

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



ঋ৫ খাবার খাওয়া জনিত সমস্যার কারণে আমার আয় কমে গেছে

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



চ৭. গিলতে সমস্যা হবার কারণে আমার খাবার খেতে অনেক সময় লাগে

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



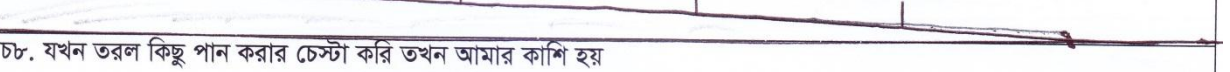
চ৩. লোকজন আমাকে প্রশ্ন করে “ তুমি কেন খেতে পার না কেন?”

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



উ৩. অন্যরা আমার খাবার খেতে সমস্যার কারণে বিরক্তবোধ করে

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



চ৮. যখন তরল কিছু পান করার চেষ্টা করি তখন আমার কাশি হয়

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



ঋ৩. খাবার গিলতে পারার সমস্যা আমার ব্যক্তিগত ও সামাজিক জীবনকে সীমাবদ্ধ করে দিয়েছে

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



*ঋ২. আমি আমার বন্ধু, প্রতিবেশী ও অস্ট্রীয়দের সাথে বাইরে খেতে যেতে সাক্ষন্দবোধ করি

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



চ৫. খাবার খাওয়ার সমস্যার কারণে আমি আমার খাবার গ্রহণের পরিমাণ কমিয়ে দিয়েছি

তীব্রভাবে সম্মত সম্মত মতামত নাই অসম্মত তীব্রভাবে অসম্মত



<p>চ১. খাবার খাওয়ার সমস্যা হবার কারণে আমি স্বাভাবিক ওজন ঠিক রাখতে পারছি না</p>				
তীব্রভাবে সম্মত	সম্মত	মতামত নাই	অসম্মত	তীব্রভাবে অসম্মত
<p>উ৬. খাবার গিলতে সমস্যার জন্য আমার আত্মবিশ্বাস কমে গেছে</p>				
তীব্রভাবে সম্মত	সম্মত	মতামত নাই	অসম্মত	তীব্রভাবে অসম্মত
<p>চ৪. খাবার খাওয়ার সময় আমার মনে হয় অনেক খাবার খেয়ে ফেলছি</p>				
তীব্রভাবে সম্মত	সম্মত	মতামত নাই	অসম্মত	তীব্রভাবে অসম্মত
<p>ঋ৪. আমার খাদ্যঅভ্যাস এর কারণে আমি নিজেকে আলাদা/একঘরে মনে করি</p>				
তীব্রভাবে সম্মত	সম্মত	মতামত নাই	অসম্মত	তীব্রভাবে অসম্মত

প্রশ্নপত্রটি সম্পূর্ণ করার জন্য ধন্যবাদ

অংশ গ্রহনকারীর স্বাক্ষর/ টিপসই -

তারিখঃ

সাক্ষীর স্বাক্ষর/ টিপসই -

তারিখঃ

সাক্ষাৎকার গ্রহন কারীর স্বাক্ষর/ টিপসই -

তারিখঃ

Annexure: III

সম্মতিপত্র

এই গবেষণা স্পীচ এন্ড ল্যাঙ্গুয়েজ থেরাপি বিভাগের অধ্যয়নের একটি অংশ এবং গবেষকের নাম জোহরা আলম ইতি। তিনি বাংলাদেশ হেলথ প্রফেশনস ইন্সটিটিউটের বি. এস. সি ইন স্পীচ এন্ড ল্যাঙ্গুয়েজ থেরাপি বিভাগের ৪র্থ বর্ষের অধ্যয়নরত একজন ছাত্রী এবং তার গবেষণার বিষয় নাক কান গলায় ক্যান্সার আক্রান্ত রুগীর কেমোরেডিওথেরাপি নেওয়ার পর খাদ্য সম্পর্কিত জীবনমান। এই গবেষণায় আমি----- একজন অংশগ্রহণকারী এবং আমি এই গবেষণার উদ্দেশ্য পরিষ্কারভাবে জানতে পেরেছি। আমি যে কোন সময় এবং গবেষণার যেকোন পর্যায়ে আমার অংশগ্রহণ প্রত্যাহার করতে পারি। এজন্য আমি কারো কাছে জবাব দিহি করতে বাধ্যনই।সাক্ষতের সকল তথ্য যেগুলো গবেষণার কাজে ব্যবহৃত হবে, সেগুলো সম্পূর্ণ ভাবে গোপন থাকবে। শুধুমাত্র গবেষকের তথ্য সমূহে প্রবেশাধিকার পাবে।কোন প্রকার নাম প্রকাশ হবে না।

আমি গবেষণার পদ্ধতি এবং জটিলতা অথবা সাফল্যের ব্যাপারে বা গবেষণার তত্ত্বাবধায়কের সহিত আলোচনা করতে পারব।

আমি উপরি উক্ত সকল তথ্য গুলো সম্পর্কে জানি এবং আমি এই গবেষণায় অংশগ্রহনে সম্মতি জ্ঞাপন করছি।

অংশগ্রহণকারীর সাক্ষর/ টিপসই _____ তারিখ: _____

গবেষকেরসাক্ষর: _____ তারিখ: _____

Annexure: IV

Consent Form (English)

The investigator Johora Alam Eity is a 4th year student of B. Sc. In Speech and Language Therapy in Bangladesh Health Profession Institute (BHPI). This study is part of course curriculum. In this study participant has clearly been informed the purpose of the study as to find the impact of Dysphagia on Quality of Life after taking treatment of Head & Neck Cancer.

In this study I am

a participant or sample and I have been clearly informed about the purpose of the study. I am willingly participant in this study. I will have the right to withdraw in taking part any time at any stage of the study and I am not bounded to answer to anyone to get me out of the study at any time. This study will not cause any benefit or impact on participant work at present and future.

I will also inform that, investigator will keep all information confidential and personal identity such as participant's name & address will not be published anywhere of the study. The research will be available to answer any study related question to the participant. I have been informed about the above- mentioned information and I agree participant willingly with giving my consent.

Signature of the study Participant:

Date:

Signature of the Researcher:

Date:

Annexure: V

Permission to conduct the study

Permission Letter

Date: 13.09.2014

To

Head (Acting),

Department of Speech & Language Therapy,

Bangladesh Health Profession Institute (BHPI),

CRP, Chapain,

Savar, Dhaka.

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

Sir,

With due respect I state that I am a 4th year student of B.Sc. in Speech & Language Therapy of BHPI, academic institute of CRP. I am sincerely seeking your permission to conduct my research project as the partial fulfillment of the requirements for the degree of B.Sc. in Speech & Language Therapy. The title of my research project is "Impact of Dysphagia on Quality of Life after Taking Treatment of Head & Neck Cancer Patient in Bangladesh." The main objective of the study is to find out the impact of Dysphagia on quality of life among the people with head and neck cancer following radiotherapy, chemotherapy and chemoradiotherapy in specialized hospital in Bangladesh.

Now I am seeking your kindness to approve me to conduct the research project and I would like to assure that anything of my research project will not harmful for the participants.

So, I therefore pray and hope that you would be kind enough to grant me the permission of conduction the research project and it will help to conduct a successful study as a part of my course.

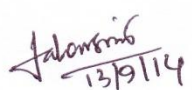
Yours obediently

Johora Alam Eity

4th year, B.Sc in Speech & Language Therapy,

Bangladesh Health Professions Institute (BHPI),

CRP, Savar, Dhaka

Course Coordinator	Comments and Signature
Md. Jahangir Alam Head (Acting) Department Of Speech & Language Therapy BHPI, CRP, Chapain, Savar, Dhaka-1343	permitted to start the project.  13/9/14

Annexure:VI

Permission for data collection

Data Collection Permission Letter

Date: 13.09.2014

To

Head (Acting),

Department of Speech & Language Therapy,

Bangladesh Health Profession Institute (BHPI),

CRP, Chapain,

Savar, Dhaka.

Subject: Prayer for seeking permission for data collection as part of research project conduction

Sir,

With due respect I state that I am a 4th year student of B.Sc. in Speech & Language Therapy of BHPI, the academic institute of CRP. I am sincerely seeking your permission to conduct my research project as the partial fulfillment of the requirements for the degree of B.Sc. in Speech & Language Therapy. The title of my research project is "Impact of Dysphagia on Quality of Life after Taking Treatment of Head & Neck Cancer Patient in Bangladesh." The main objective of the study is to find out the impact of Dysphagia on quality of life among the people with head and neck cancer following radiotherapy, chemotherapy and chemoradiotherapy in specialized hospital in Bangladesh.

Now I am seeking your kindness to approve me to conduct the research project and I would like to assure that anything of my research project will not harmful for the participants.

So, I therefore pray and hope that you would be kind enough to grant me the permission to collect the data from the participant of the research project and it will help to conduct a successful study as a part of my course.

Yours obediently

Johora Alam Eity

Johora Alam Eity

4th year, B.Sc in Speech & Language Therapy,

Bangladesh Health Professions Institute (BHPI),

CRP, Savar, Dhaka

Course Coordinator	Comments and Signature
Md. Jahangir Alam Head (Acting) Department Of Speech & Language Therapy BHPI, CRP, Chapain, Savar, Dhaka-1343	<i>you can start your data collection</i> <i>Jahangir</i> <i>13/9/14</i>

Annexure:VII

Persmission letter from “NICRH”



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 : ২৭.১০.২০১৪

Acad. Secretary
09/11/14



প্রতি

পরিচালক

ন্যাশনাল ইনস্টিটিউট অব ক্যালার রিসার্চ এন্ড হাসপাতাল

মহাখালী, ঢাকা।

বিষয় : রিসার্চ প্রজেক্ট (dissertation) এর জন্য আপনার প্রতিষ্ঠান সফর প্রসঙ্গে।

জনাব,

আপনার সদয় অবগতির জন্য জানাচ্ছি যে, পঞ্চাষাত্মস্তদের পুনর্বাসন কেন্দ্রে-সিআরপি'র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই) ঢাকা বিশ্ববিদ্যালয় অনুমোদিত বিএসসি ইন স্পীচ এন্ড ল্যাঙ্গুয়েজ থেরাপি কোর্স পরিচালনা করে আসছে।

উক্ত কোর্সের ছাত্রছাত্রীদের কোর্স কারিকুলামের অংশ হিসাবে বিভিন্ন বিষয়ের উপর রিসার্চ ও কোর্সওয়ার্ক করা বাধ্যতামূলক।

বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন স্পীচ এন্ড ল্যাঙ্গুয়েজ থেরাপি কোর্সের জোহরা আলম ইতি তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ৩০.১০.২০১৪ তারিখ থেকে ২৫.১১.২০১৪ তারিখ পর্যন্ত সময়ে আপনার প্রতিষ্ঠানে সফর করতে আশ্রয়ী।

তাই তাকে আপনার প্রতিষ্ঠান সফরে সার্বিক সহযোগিতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

অধ্যাপক ডাঃ এম এ কাদের

অধ্যক্ষ

বিএইচপিআই।



Annexure: VIII

Permission letter from “Delta Medical College”



বাংলাদেশ হেলথ 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 : ২১.০৯.২০১৪

প্রতি
পরিচালক
ডেলটা মেডিকেল কলেজ ও হাসপাতাল
ঢাকা।


বিষয় : রিসার্চ প্রজেক্ট (dissertation) এর জন্য আপনার প্রতিষ্ঠান সফর প্রসঙ্গে।

জনাব,
আপনার সদয় অবগতির জন্য জানাচ্ছি যে, পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রে-সিআরপি’র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই) ঢাকা বিশ্ববিদ্যালয় অনুমোদিত বিএসসি ইন স্পীচ এন্ড ল্যান্ডুয়েজ থেরাপি কোর্স পরিচালনা করে আসছে।
উক্ত কোর্সের ছাত্রছাত্রীদের কোর্স কারিকুলামের অংশ হিসাবে বিভিন্ন বিষয়ের উপর রিসার্চ ও কোর্সওয়ার্ক করা বাধ্যতামূলক।

বিএইচপিআই’র ৪র্থ বর্ষ বিএসসি ইন স্পীচ এন্ড ল্যান্ডুয়েজ থেরাপি কোর্সের ছাত্রী জোহরা আলম ইতি তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ২৪.০৯.২০১৪ তারিখ থেকে ৩১.১০.২০১৪ তারিখ পর্যন্ত সময়ে আপনার প্রতিষ্ঠানে সফর করতে অগ্রহী।

তাই তাকে আপনার প্রতিষ্ঠান সফরে সার্বিক সহযোগিতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে


অধ্যাপক ডাঃ এম এ কাদের
অধ্যক্ষ
বিএইচপিআই।



Approved
1
23.9.14