"An exploration of time use of patient with schizophrenia in the National Institute of Mental Health in Bangladesh"

By

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STATEMENT OF AUTHORSHIP

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

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Dedication

The research is dedicated to my parents who are making everything worthwhile.

Abstract

Research aim

To explore how patients with schizophrenia use their time on a psychiatric ward at NIMH in Bangladesh.

Methodology

The studies investigate the Occupational experience of people with schizophrenia in NIMH. Researcher will conducted Qualitative research and quantitative design to collect more structural and in depth information about patient with schizophrenia use their time in the occupational performance at the psychiatric ward. Quantitative (occupational questionnaire), qualitative (semi-structured interview) and field test were collected over two weeks. Six participants are recruited from the study settings (NIMH).

Results

In this study time use data characterized predominantly by engagement in leisure (38%) and rest (37%) occupation and little more dominant in self care activity (17%) and vary few proportion of time that they performed in productivity (8%). In the quantitative results suggest that the participant doing their activity as they felt good, very good, poorly, very poorly and they gave importance as they felt very important, important, take it or leave it, rather not do it and someone feel it total waste of time and about interest as they felt like it, very much like it, like it or dislike it, dislike it, very much like it. In the qualitative results shows that the environmental influence, lack of basic needs, immediate life needs a wish for satisfaction or wanting to escape the reality is the common influence of time use which facilitated the participant to spent time passively and rest occupation.

Conclusion:

This studies explored that how patient with schizophrenia use their time at NIMH. In conclusion the participant spent most of the activities in sitting, lying down and rest occupation. Few occupational situations, facilate the participant to do more passive occupation .This situation may results in boredom, powerlessness and frustration. The structure occupational situation and maintained it in a regulatory manner as a structure daily, this will may effect on a time use pattern. In the Occupational Therapy point of view it would be probably be important to help reshape the environment and help regain roles that involves interacting with the outside world.

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Chapter-1 Introduction

1.1. Introduction

The pace of life makes connection with the biological rhythms (tempo), from the subjective perception of the past, present, future (temporality) and what an individual does with their time and why (time use) are central to the philosophies of occupation (Farnworth & Fossey 2003). The time use, the area of social science that focuses on what an individual does with their time and why. Since 1922, it was recognized that the people who maintain a balanced, varied and purposeful use of time, get the chance for maintaining and regenerating health (Pentland, Harvey & Walker 1998). Occupational therapy was founded, the balanced between the different types of occupation, that compose daily life of people in terms of i.e.- self care, work and play- are vital for adaptation (Mayer 1922, 1977). It has been said that most people with long term disability and chronic illness or severe disability not only interfere with the individual's ability to perform in a specific task, but can also impair the person ability as well as a person's daily life roles- self care and productivity (Pentland, Harvey & Walker 1998). The essential fact for the people with psychosis is the restricted participation because it restricted the nature of the person, quality of experience and participation in own life and society (Foster et al. 1996). Mental health services taking people always want more participation in their work, education and recreational activity (Bates 2002; Chesworth et al. 2002, Honey 2004 & Secker, Grove & Seebohm 2001). People who have mental disability always participate in being less diverse, involve themselves in fewer social activities and become less active in recreational activities (Law 2002, Pentland & McColl 1999). People who develop schizophrenia often can't perform age related developmental activities like self maintenance and play (American Psychiatric Association 1994). People with schizophrenia are maintaining the sedentary life style and involvement in few leisure and social activity (Brown et al. 1999). Time use studies determine the amount of time that people allocate to different daily living activities and they are widely used and have been validated (Farnworth, Nikitin & Fossey 2004). A number of time use studies have been completed in an attempt to quantify how people who have mental illness are spending their time. The overall opinion is that people with persistent mental illness are spending their time sleeping and in passive leisure occupations

(Bejerholm & Ekland 2007). To have a time use perspective means that the reflection of a realistic picture of daily occupation (Rosenthal & Howe 1984, Suto & Frank 1994). According to Harvey (cited in Kramer, Hinojosa & Royeen, CB 2003) he states,

'Evaluation of quality of life is closely linked with how one's live daily life - the degree of congruence between one's behaviors. Time use studies capturing structure the living of one's life as it lived in terms of what is being done, with whom, where and in what frame make an ideal contribution to the evaluation of the quality of life' .

1.2. Background

The dynamic relationship between occupation, health and wellbeing, was recognized by the occupational therapist (Cronin_Davis 2010). Occupations and personal activities have particular significance and purpose to an individual and help in people's identity expression. To help people engage in occupations which they need or want to do, and enable them to lead personally fulfilling and healthy lives are the goals of occupational therapy.

Two epidemiological surveys in North London investigated about the quality of occupational engagement, the study found that most people with mental illness feel bored due to a lack of daily structure and meaningful activity (Harvey & Shimitras et al. cited in Stewart & Craik 2007). According to the National Mental Health Survey in 2003-2005 about 16.05% of the adult populations in the country are suffering from mental disorders (WHO 2007).

All of the time use studies found that the participation of people diagnosed with mental illness in their occupation that fill their time meaningfully is often more limited than that of people without clinical condition (Weeder 1986, Hayes & Halford 1996). Studies in the Netherlands found that according to census based control, maximum people with different mental illnesses spent significantly more time doing nothing while those were not largely engaged in purposeful occupation (Delespaul & de Vries cited in Schimitras, Fossey & Harvey 2003). People with mental illness were significantly less likely to be inactive and less engagement in self-care, productive in social occupation (Krupa et al. 2003). Occupational engagement is slower day by day, because the person with mental illness is less likely to value, enjoy and also lose competence (Crist, Davis & Coffin 2000).

Specific information is needed by the researcher to improve understanding as to how people with mental disabilities organize their daily lives and how this differs from the population that constitutes temporal balance and imbalance for those with mental disabilities and to determine what the causes which are associated with the healthy use of time in this person whose balance with time use is threatened.

The researcher had previous experience working with patients with mental illness during her 3rd year placement. During the placement the researcher got a chance to work for 4 weeks. The researcher worked there for a certain period but it was not satisfactory enough because the researcher got superficial concepts about their living life. From that concept, the researcher felt interested to conduct a study for acquiring in-depth knowledge about how they pass their time everyday life in the NIMH. At that time the researcher was curious about their life style, and their time usage. When the researcher got the chance to do a study at her 4th year as a compulsory project, she tried to use the chance to resolve her curiosity. Patients have a variety of diagnosis and as she had experience working with Schizophrenia, she showed her interest to work with patients who were diagnosed as Schizophrenic. At that time a question arase in her mind about how a patient with schizophrenia uses their time in the psychiatric ward? The researcher asked several staff of NIMH about their time use but the answers were not satisfactory. Then the researcher was interested to find out how patients with schizophrenia use their time in the psychiatric ward.

1.3. Significance

Occupational therapy started on the basis of mental health on the other hand mental health is the most neglected part of our health care delivery system. Each year BHPI conducts a placement in NIMH for their 3rd year B.Sc. students and it is a mandatory placement for everyone. During placement Occupational therapy students work with patients who stay in the psychiatric ward of NIMH. The aim of this study is to explore how patients with schizophrenia use their time in the National Institute of Mental Health in Bangladesh in the psychiatric ward. Occupational therapy aims to engage patients in meaningful occupational performance (self-care, productivity, leisure and rest occupation), the study's findings will help occupational therapists to provide interventions in psychiatry settings in Bangladesh mental health sector and on the other hand, if they (patient with mental disabilities) get proper intervention from occupational therapists that may help the patients to improve their occupational

performance, socialization, prevent further deterioration of their condition and reduce their violent thinking to improve their chance of reintegration back into the community on release. Because occupational therapists are instrumental in helping people engage in an activity, and develop an occupation of their choice (Farnworth, Nikitin & Fossey 2004**,** Stewart & Craik 2007). On the other hand, an occupation can be helpful to provide opportunities to an individual to increase socialization, develop new skills, pass the time effectively, and make a relationship with the outside world (Heibig 2003a). These time use studies in psychiatric settings will provide knowledge about patients and inform the rehabilitative environments of this setting, occupational therapy contribution and to show the importance of occupational therapy contribution in psychiatric settings. In the NIMH there is not an occupational therapist present to work with the person with mental illness. As a clinician it is more important to provide treatments which are more clients centered and relevant. From the research perspective, it felt important to explore occupational therapy with these patients; and to disseminate the evidence. So this project will help to show the importance of occupational therapy contribution for Psychiatric patients. Through this project it will emerge how patients pass the time and feelings during their stay in the psychiatric ward in NIMH. From the results it will also be viewed the importance of Occupational therapy contribution to pass a quality time for the psychiatric patients of NIMH.

1.4. Aim and objectives

1.4.1. Aim

To explore how patients with schizophrenia use their time on a psychiatric ward at NIMH in Bangladesh.

1.4.1. Objective

- To explore the self-care of patient's with schizophrenia in the psychiatric ward.
- To explore the productivity of patients diagnosed with schizophrenia in a psychiatric setting.
- To explore the leisure activity (active leisure, passive leisure, social occupation) in the psychiatric ward.
- To explore their rest activity in the psychiatric ward.

Chapter-2 Literature review

2.1. Introduction on time use

The most familiar area of the study to the occupational therapist is 'time use'. The world activity limitation is a measure of disability recognized by the Health organization (2001). For capturing the context and flow of activities inherent in occupation, time use studies are specially designed (Hervey & Pentland 2010). Occupation and time are like two sides of the same coin (Cristiansen 2005, Hervey & Pentland 2010, Pemberton & Cox 2011). The relationship between time and occupation is most recent discussed in a published literature review that suggests considering temporal factors (time use, tempo and temporality in order to maximize the benefit of occupation) (Pemberton & Cox 2011). According to Mayer (1922, 1977, p. 642) he suggested that *'A full meaning of time and the valuation of opportunity and performance as the greatest measure of time should be central of philosophy of occupational therapy'*. All human action is located in time, including past, present and future, a commonality of the human condition is time use (Farnworth 2003). By using the International classification of Function terminology (ICF), World Health Organization (2001), occupational therapists analyzing how people allocate their time to activities, places and interaction can understand the impact of disability on their participation in activities. Proper use of time, how people experience time, what controls its use and how it affects wellbeing can be measured by time use (Brooker & Hyman 2010). Time and occupation are interrelated in everyday life: action and time are associated components of the human experience (Keilhofner 1997, pp. 237). To understand how people with schizophrenia go about their daily lives can be deepened upon time use perspective (Suto & Frank 1994). A variety of instruments have been used in occupational therapy to identify the time use of persons and their perception of time. Occupation can be defined as what an individual does in everyday life (Cristiansen et al. 1995). It becomes relevant with the time perspective because it occupies one's daily life. The use of time is connected with one's physical, social, cultural, and environmental demands. Every individual has occupational roles that he plays. Harvey & Pentland (2010**)** this doing comes with some other question like when we do and why and how we do. Answering all these

question related to what, why, when, and how would make it clear the structure of daily occupation and it's relation with the wellbeing of the individual.

Time is a vital aspect of occupation, Mayer at the beginning of the 20th century originally suggested how people use their time and it can also help the understanding of the functional impact of mental illness. Time use studies are able to give us a window on actual lifestyle (Pentland, Harvey & Walker 1998). Time use studies of people with disabilities suggest that disability has a negative impact on the time use in terms of the frequency of activities participated in and altered time allocation compared with the general population. This is important because people with disabilities have been shown to experience less satisfaction with their performance of activities, so they do less and enjoy less (Farnworth 2003). Studies of the time use and experience of the time use of people with a mental illness, both living in the institution, constantly indicate that lives are dominated by solitary and passive leisure occupations (Suto & Frank 1994, Weeder 1986). In summary, similar patterns of time use are found across studies of time use for people with a persistent mental illness: sleeping, personal care and leisure are predominant, although limited daily routine and lack of occupational variety appear to be an issue in ward environments (Farnworth, Nikitin & Fossey 2004). A time use study determines the amount of time people allocate to various daily living activities. An average number of hours for each of the main categories (as well as activities) will be calculate based on four focus area of occupational performance-self-care, productivity, leisure and rest.

- **Self - care**: This category included meal taking, dressing, washing, bathing, praying and taking medication (Pentland, Harvey & Walker 1998).
- **Productivity**: This category included the activities where participation as voluntary in the hospital, doctor attended and child care and ward activities. (Pentland, Harvey & Walker 1998).
- **Leisure**: The category included active leisure (physical exercise, visiting in another ward), passive leisure (reading newspaper, relaxing, and thinking) and socialization (chatting with peer group in the ward) (Pentland, Harvey & Walker 1998).
- **Rest**: Time devoted to sleep activity (Chapparo & Ranka 1997, p. 4).

2.2. Time use and institutional environment

As an institutional environment is a very important concern, it should be well developed, so that, the time use of patients with mental illness will be satisfactory. In the long term resident facilities and constraints of resident routine create a new life shape and make a way of occupying time for the person with schizophrenia. (Champney & Dzurec 1992, Suto & Frank 1994). Moreover, an environment can provide different types of opportunities, constraints and demands when performing activities (Kielhofner 2002a).

The hospital (NIMH) environment is restricted environment for the patient with mental illness, in this hospital they are restricted to go outside. In one room many people live together, so it is a noisy and crowded environment. There daily routine is so limited, with very few opportunities to perform in purposeful activity.

Hence, Institutional life in the psychiatric setting exert restrict choice, control and opportunities for engagement in valued occupation. Their daily routine is limited, with very few activities or rituals to punctuate the passing of time within a day, or allow for differentiation between days. Gay et al. cited in Farnworth, Nikitin & Fossey (2004) reported that '*The participant described being dissatisfied with their time use and perceived their environment to lack of variety*'. He found that the participant with mental illness spent time mainly sleeping and in passive leisure occupation. Rehabilitation outcomes may be hampered for staying in the restricted environment which may influence occupational choice and performance of occupations (Gay et al. cited in Farnworth, Nikitin & Fossey 2004).

2.3. Time use and Schizophrenia

People with schizophrenia often have problems with organizing daily occupations, this may result in a chaotic way of dealing with time Neville (1980) and create a disharmony between the future image, plans of action and emotion (Melges cited in Bejerholm & Eklund 2004). There is no specific description of how the mentally ill spend their time, about the relationship between mental illness and how time is experienced (Suto & Frank 1994).

To explore the use of time and daily life experiences of people with persistent mental illness, living in institutions, constantly indicate lives dominated by sleeping and by solitary and passive leisure occupation (Weeder 1986, Suto and Frank 1994, Heyes & Halford 1996, Krupa et al. 2003**,** Shimitras, Fossey &

Hervey 2003). The person with schizophrenia have significantly more time in active leisure, sleeping or in passive leisure occupation but few engage in work or word related activities. The studies suggest that people experiencing mental illness, including those diagnosed with schizophrenia, tend to predominantly to participate to relatively inactive and solitary types of occupations. According to the Wilcock's (1998) perspective,

'The time use problems of people with mental illness –their lack of occupation that is meaningful or facilate social connection –reflect continuing sources of stress that have an impact on health status, recovery and social connection'.

2.4. Schizophrenia:

Definition and defining feature:

Mental illness is a disease process and can be defined by symptoms resulting in functional problems and differences in a person's own psychological norms. Schizophrenia may be a developmental disorder resulting from alterations in the maturation of the nervous system. Schizophrenia is a complex disorder where the health cannot be understood in relation to biological aspect only (Tsang & Pearson 2000). Schizophrenia is characterized by a retreat from reality with delusion formation, hallucinations, emotional deregulation and disorganized behavior. There are also more subtle signs that develop over time - slow declines in mental function and social relationships lead to marked personality change, social isolation and occupational disability.

DSM-IV, Mason et al. (1997) has stated that schizophrenia is neither; "split personality" nor "multiple personality". Furthermore, people with schizophrenia are not personally disrupted in cognition and emotion, affecting the most fundamental human attribute-language, thought, perception, affect and sense of self.

2.5. DSM-IV Diagnosistic criteria of the schizophrenia (Schizophrenia| Behave Net 2012): (Table-1)

A. Characteristic symptoms	Two of the following, each present for significant portion of time during 1 month period- delusion, hallucination, disorganized speech, grossly disorganized and catatonic behavior, negative symptoms e.g, affective flattening, alogia, avolition.
B. Social and occupational dysfunction	For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as wok, interpersonal relationship, and self-care are markedly below the level achieved prior to the onset.
C. Duration	Continuous signs of the disturbance persist for at least 6 month. This 6 month period include at least I month of symptoms that meet criteria A and may include the periods of prodromal or residual symptoms
D. Schizoaffective and mood disorder exclusion	The psychotic feature have been ruled out because either no major depressive, manic and mixed episode have occurred with concurrently with active phase symptoms
E. Relationship to a pervasive developmental disorder	If there a history of autistic disorder or pervasive developmental disorder the additional diagnosis of schizophrenia is made only if prominent delusion, hallucination present for 1 month

2.6. Epidemiology

"Lifetime incidence is approximately 1-1.5% and 2 million new cases appear each year worldwide. Prevalence morbidity and severity of presentation are greater in urban areas than rural**.** Schizophrenia is equally prevalent in men and female. The male ratio is 1:1 (Firoz 2001a)**.**

Keplan et al. **(**1994) mentioned that men have an earlier onset of schizophrenia than women. The peak ages of onset for men are 15 to 25; for women the peak ages are 25 to 35. The onset of schizophrenia before age 10, after this age it is extremely rare. According to Firoz (2001a) estimation that lower socioeconomic groups are more violence for this condition. Schizophrenic people died earlier than other people. Man's lives may be shortened by 10 years and women's by 9 years. Firoz (2001a) estimated that 'direct and indirect costs to Bangladesh is approximately 50 million taka per year'.

2.7. Etiology

The etiology of schizophrenia is complex and yet undetermined. It is probably a combination of several different things, which will be different for different people (Royal College of psychiatrist 2011). Although only 1 in 100 people get schizophrenia, about 1 in 10 people with schizophrenia have a parent with the illness. An identical twin has exactly the same genetic make-up as his or her brother or sister, down to the smallest piece of DNA. Brain damage is the cause of schizophrenia – but not in others.

A problem during birth that stops the baby's brain from getting enough oxygen. Sometimes, street drugs seem to bring on schizophrenia. The heavy use of cannabis seems to double the risk of developing schizophrenia. New research has shown that the stronger forms of cannabis, such as skunk, may increase this risk. If people of the family have schizophrenia, family tensions can certainly made it worse. As with other mental disorders, schizophrenia is more likely if individual were deprived or physically or sexually abused as a child (Royal College of psychiatrist 2011).

2.8. Classification of schizophrenia (table-2)

DSM-IV diagnosis	Main feature (Mulhauser 2011)
Paranoid schizophrenia	➢ Preoccupation with one or more delusions or frequent auditory hallucinations. ➢ None of the following is prominent: disorganized speech, disorganized or catatonic behavior, or flat or inappropriate affect.
Catatonic schizophrenia	➢ Motoric immobility as evidenced by catalepsy (including waxy flexibility) or stupor. ➢ Excessive motor activity. ➢ Extreme negativism (an apparently motiveless resistance to all instructions or maintenance of a rigid posture against attempts to be moved) or mutism. ➢ Peculiarities of voluntary movement as evidenced by posturing (voluntary assumption of inappropriate or bizarre postures). ➢ Stereotyped movements, prominent mannerisms, or prominent grimacing. ➢ Echolalia or echopraxia.
Disorganized schizophrenia	➢ Disorganized behavior. ➢ Disorganized thought. ➢ Flat and appropriate thought.
Undifferentiated schizophrenia	➢ The criteria are not met for the Paranoid, Disorganized, or Catatonic Type.
Residual schizophrenia	➢ Absence of prominent delusions, hallucinations, disorganized speech, and grossly disorganized or catatonic behavior. ➢ There is continuing evidence of the disturbance, indicated by the presence of negative symptoms or two or more symptoms.

2.9. Prognosis

There is no known cure for schizophrenia. Fortunately, there are effective treatments that can reduce symptoms, decrease the likelihood that new episodes of psychosis will occur, shorten the duration of psychotic episodes and in general, offer the majority of people with suffering from schizophrenia the possibility of living more productive and satisfying lives. If they get proper medication and supportive counseling, the ability of schizophrenic people to live and function relatively well in society is excellent. The outlook for this patient is optimistic.

- Ten years after initial diagnosis, approximately 50% of people diagnosed with schizophrenia are either noted to be completely recovered or improved to the point of being able to function independently
- 20% are improved, but require a strong support network
- Additional 15% remain unimproved and are typically hospitalized
- Unfortunately, 10% of the affected population sees no way out of their pain expect through death and ends up committing suicides (Nemade & Dombeck 2009)

2.10. Symptoms of schizophrenia

People with schizophrenia may lose their ability to use their time properly, relax, concentrate or sleep and they may withdraw the reality. A schizophrenic symptom is typically divided into positive and negative because of their impact on diagnosis and treatment (Crow 1995, Klosterkotter et al. 1995 & Maziade et al. 1996). Positive symptoms are those that appear to reflect an excess or distortion of normal function Peralta & Cuesta (cited in Kramer, Hinojosa & Royeen, CB 2003). Negative symptoms are those that appear to reflect on a diminution or loss of normal function (Crow 1995, Blanchard et al. 1998).With this schizophrenic symptoms a person commonly experienced dysfunction one or more major areas such as work, education, family life communication and self care (Docherty et al. 1996).

2.10.1. Positive symptoms of schizophrenia

These are unusual experiences. In schizophrenia, an individual tends to be much more intense, troublesome, pre-occupying and distressing. Because of the following symptoms the patient with schizophrenia loss their sense and leads an abnormal life. According to the Royal college of psychiatrist (2011), the positive symptoms of schizophrenia

2.10.2. ***Hallucinations***

A hallucination happens when the person hears, smells, feels or sees something - but it isn't caused by anything around you. The commonest one is hearing voices.

An example: They sound utterly real. They usually seem to be coming from outside, although other people can't hear them. People may hear them coming from different places, or they may seem to come from a particular place or thing. Voices can talk to you directly or talk to each other about you – it can be like over-hearing a conversation. They can be pleasant, but are often rude, critical, abusive or just plain irritating.

2.10.3. ***Other kinds of hallucination***

People see things that are not there or may smell or taste things that aren't there. Some people have uncomfortable or painful feelings in their body or feelings of being touched or hit.

2.10.4. ***Delusions***

A delusion happens when they believe something and are completely sure of it, while other people misunderstand what is happening. Person has no doubts, but other people see the belief as a mistake, unrealistic or strange. If a person do tries to talk about the ideas with someone, this reasons don't make sense to them, or can't explain – people 'just know'. It's an idea, or set of ideas, that can't be explained as part of the culture, background or religion.

An example: It may suddenly dawn on that last the person really understood what is going on. This may follow weeks or months when a person feels that there has been something wrong, but they couldn't work out what it was. A delusional idea can be a way of explaining hallucinations. If hearing voices that talk about a person, may explain it to self with the idea that a government agency is tracking this person.

1.10.5. ***Paranoid delusions***

These are ideas that make the person feel persecuted or harassed. They may included_

1.10.6. ***Unusua*****l**: Feels like the government is spying on you.

1.10. 7. ***Every day****:* An individual's start to believe the partner is unfaithful.

2.10.8. ***Ideas of reference***

It feels as though things are specially connected to possibly a radio or TV programmes or that someone is telling the person things in odd ways, for example, through the colours of cars passing in the street (Royal college of psychiatrist 2011).

2.10.9. *Thought disorder*

Thoughts and ideas may seem jumbled and make little sense to others. Conversation may be very difficult and this may contribute to a sense of loneliness and isolation (Schizophrenia| Mind 2011).

2.10.10. *Disorganized thinking*

Thoughts may flash by concentration is difficult and the patient is often easily distracted, unable to focus on attention. They are unable to connect thoughts into logical sequence and their thought process, called thought disorder, can make a conversation very difficult and result in social isolation. Thought disorder or loosing of association, is a key aspect of schizophrenia. Disorganized thinking is usually assessed primarily based on the person's speech (Schizophrenia symptoms diagnosis and Treatment centers 1996-2010).

2.10.11. *Agitation*

Schizophrenia patients are often extremely agitated. When they are agitated they feel tense, short-tempered and wound up too tightly. Agitation can also lead to suicidal thoughts and behaviors (Schizophrenia| Mind 2011).

2.11. Negative symptoms: According to (Royal college of psychiatrist 2011)-

2.11.1. *Loss of insight*

It feels as though everyone else is wrong, that they just can't understand the things that an individual can.

2.11.2. *Depression*

If any person develops schizophrenia for the first time, there is a roughly 50-50 chance that people will feel depressed, often before you get more obvious symptoms. Around 1 in 7 people with continuing symptoms will become depressed.

2.11.3. *Lack of drive and initiatives*

A distinct lack of drive or initiatives is often observed in patients. They seem to have lost their enthusiasm or interest in things (Harrisonn 2007).

2.11.4. Social withdrawal

People with schizophrenia tend to become isolated and often prefer their own company and avoid contact with others, when forced to interact, they often have nothing to say. When people stay in the withdrawal phase they do not maintain any connection with reality, it affects the daily life and may not maintain the proper use of time.

2.12. Schizophrenia and occupational performance (self-care, productivity, Leisure and rest):

2.12.1. Schizophrenia and self care

People with a mental illness can have a difficult time with self-care and they neglect to practice healthy life behaviors (Everyday health-feel good, feel better 2010). It is important for everyone especially those with a mental illness (schizophrenia) because they lead a sedentary lifestyle and obesity. Schizophrenia has a negative impact on the ability to complete self-tasks. Because they have a lack of motivation which is the part of the problem. Diminished motivation leads to some people being less active. The daily routine of the individual with schizophrenia has been disturbed. It tends to form difficulties in home, in relationships with family and sometimes in basic self-care eating, grooming and toileting (Psychiatry and behaviors science, schizophrenia symposium 2012).

2.12.2. Schizophrenia and productivity

Law (2002) defined productivity as a means of contributing to the social and economic fabric of the society. Productive activities such as paid work and volunteer work provide people with a sense of purpose, giving structure to their day, and offer social economic rewards, influencing self identity. As nearly, 80% of schizophrenia patients remain unemployed, the cost of the lost productivity is especially large (Mangalor & knapp 2007). Mental illnesses cause people to lose work. Comprehensive studies in the cost of schizophrenia may address lost productivity but because of the rates of disability in this population, interventions for people with schizophrenia ignore productivity looses (Mangalor & knapp 2007). In Australia it is estimated that absenteeism due to depression accounts for around six million working days lost each year, at a cost to employers of approximately 1.2 billion. In addition, depression is estimated to reduce workers performance by at least 40 per cent. For the Australian workforce as a whole, this equates to around 30 million working days per year with reduced productivity, at a cost to employers of approximately 2.3 billion (Australian Government, Department of families and housing 2011).

2.12.3. Schizophrenia and leisure

People who have severe mental illness need a sense of belonging and a feeling of satisfaction with their lives. Recreational and leisure activities may also be central to feeling connected to community life. Research has consistently indicated that

physically and socially active recreation and leisure activities are related to a higher quality of life in the general population, as well as various disabilities. Yet individuals with serious mental illnesses are significantly less active and their leisure involvement tends to be much more passive (Community inclusion of individuals with psychiatric disabilities 2010).

2.12.4. Schizophrenia and rest

Sleep disorder is common in psychosis but in fact most of scientific literature on sleep disorders in psychosis relate to schizophrenia, whether sleep disorder is a steady component of the clinical picture. Sleep and schizophrenia are also caused by the poorly defined clinical variables such as treatment status (e.g., substance abused), co-morbidity and age of onset and duration of the disease (S.R Pandi-Perumel & J.M Monti 2006, pp. 6). Few studies suggest that people with psychotic disorders predominantly most of the time in sleeping and passive leisure (Shimitras, Fossey & Hervey 2003).

2.13. Treatment:

2.13.1. Medication

It is usually an important step which can make other kinds of help possible. Other important parts of recovery are support from family and friends, psychological treatments and services such as supported housing, day care and employment schemes. Medication reduces the effects of the symptoms on your life. Medication should:

- Weaken delusion and hallucination gradually, over a periods of a few weeks
- To improve thought process of an individual (Royal college of psychiatrist 2011).

2.13.2. Psychological treatments: Cognitive Behavioral Therapy

This can be done by clinical psychologists, psychiatrists or nurse therapists. It helps to-

- Look at how people tend to think about them – the ‘thinking habits’.
- Look at how this reacts– the ‘behaving habits’.
- Look at how think or behaving habits affect an individual.
- Work out if any of these thinking or behaving habits are unrealistic or unhelpful.

- Work out more helpful ways of thinking about these things or reacting to them.
- Try out new ways of thinking and behaving (Royal college of psychiatrist 2011).

2.13.3. Counseling and supportive psychotherapy

- Get things off the chest
- Talk things over in more depth
- Get some help with the daily problems of life (Royal college of psychiatrist 2011).

2.13.4. Family meetings

These try to help an individual and the family cope better with the situation. They can be used to discuss information about schizophrenia, how to best support someone with schizophrenia and how to solve the practical problems that can crop up. Around 10 meetings are held over a period of about 6 months (Royal College of psychiatrist 2011).

2.14. Relationship between Occupational therapists role with schizophrenia and their time use:

Knowledge of how and why people do that in their time is fundamental to occupational therapist Molineux (2010) and allied health professionals assisting people to readjust to life with mental illness. When examining a relationship between time use, and schizophrenia it was found that they experienced personal meaningfulness, perceived challenge and level of satisfaction. Occupational therapists use their concept of daily time use to encourage the patient with schizophrenia to be functional independent and to consider the occupational wellbeing (Krupa et al. 2003). Occupational therapists use their knowledge to provide education and consultations for issues related to time use planning and to provide interventions for individual with schizophrenia. Occupational Therapy has been described as a ‘complex intervention’ Creek (2003, pp. 8), it gives the nature and parameters of intervention. Occupational therapists help patients with schizophrenia to assist people to develop, regain or maintain the skills required for everything living (Creek 2007). Occupational therapists help people to make small yet significant changes to their lives, to help with their sense of self and ability to change (Creek 1997). Occupational therapists, who work with patient with schizophrenia, work in multi disciplinary team,

not only contribute to treatment programmes, but also assist in the formulation of an accurate diagnosis. Occupational Therapists have a unique role to play in order to assess and gather information from their observation of patients in both individual and group sessions during hospital admission (Skinner 1987). In terms of rehabilitation, it has been noted that of occupational therapists spend more time with patients in that units than any of the professional group and therefore their unique knowledge expertise and observation is vital (Wix & Humphries 2005, p, 43). Occupational therapist can:

- Help the individual to be clear what about the skills are and what they can do.
- Occupational therapists engage the patient in group therapy for improving social interaction.
- They engage the patient in different memory training games.
- They help the patient to maintain a structured life by maintaining structured time use.
- Occupational therapist uses different kinds of treatment approach for the person with mental illness for modifying their behavior, personality which has been disturbed.
- How to improve things that aren't doing so well.
- Work out ways of helping the person to do more for own self.
- Helps to improve the person social skills (how to get on with other people).
- There may be helpful for families, with regular meetings for a while. These can help the family to learn more about the illness and treatment.
- Sort out some of the practical problems of day to day living.
- The care coordinator is responsible for making sure that the person gets the care what they need.
- Vocational rehabilitation or recovery workers can help an individual to get back into work, education or some sort of activity that you find rewarding (Royal college of psychiatrist 2011).

Chapter-3 Methodology

3.1. Study design

The study adopted Qualitative and quantitative research design, to explore time use for patients with schizophrenia use their time at National Institute of Mental Health in Bangladesh. The aim of the researcher was to understand how patients with schizophrenia experience their daily time in NIMH. Both qualitative and quantitative research design was use in the study that enhanced trustworthiness and authenticity, the meaningfulness and usefulness of the data (Lincoln & Guba, Krefting cited in Farnworth, Nikitin & Fossey 2004).

3.2. Study setting

National Institute of Mental Health

Founded in 1981, the National Institute of Mental Health is a Government facility that focuses on providing free (or very low cost) psychiatric care to the people of Bangladesh. National Institute of Mental health is the organization which works with the person with mental Illness about how client's specific problem will be eliminated - Bangladesh's incredibly effective products and/or services (National institute of Mental Health-Bangladesh 2009). In this hospital 200 psychiatry beds are provided for the patient in mental health units. In the first floor staying the male patient with different diagnosis. In the 1st floor provide treatment in security environment. In the 2nd floor, staying the female patient. This study was conducted from this institute, because schizophrenic patient are available there, so the researcher chooses this organization to select the study population. The data will be collected from both the male and female wards.

3.3. Sample collection

The participant with a primary diagnosis of schizophrenia from the male and female ward was selected from the NIMH that enhanced trustworthiness and authenticity, the meaningfulness and usefulness of the data according to sample selection criteria. The selection criterion for this study was between 18-60 years of age and had a diagnosis of schizophrenia. They have been experienced mental illness (schizophrenia) and stayed in the hospital, until they managed this condition these discharge from the hospital. The participants were not to allow leaving the ward so they are varied in a leave restriction at the time of data collection. So, the researcher collected the study

data from their own ward. Researcher must deliberately seek out those participants who fitted with the selected inclusion and exclusion criteria.

3.4. Inclusion criteria

- The participants who were diagnosed as a schizophrenic are able to participate in the study.
- The researcher selected participants aged range 18-60 years. Age is an important predictor, because according to age an individual perform their occupational performance.
- They able to speak their mind theme, in this study the researcher used the word mind theme, because if the person with mental illness has lost their sense about himself and about the outside world. So the researcher seeks out the participants whose fulfill the study fact as well as objectives.
- Able to give informed consent, it is an important concern if any problem arises in the future the participants able informed the authority, as they are willing to participate in the study.
- Participants were able to understand and respond, if the participants were communicable and understand the researchers' speech, so the participants can provide good responses. The researcher got the valid answer.
- Patients with no and less aggressive behavior should be reminded that if the participants were vulnerable, the patient can hurt the researcher.

3.5. Exclusion criteria

- The individual/participants experiencing an acute crisis or a relapse of their mental illness. In the relapsing stage there are reoccurring of the different symptoms of the schizophrenia.
- Patients who are mute, unable to communicate, patient who are staying in the withdrawal phase in this situation most of the patient have tendency to escape from the reality.
- Patients who are unwilling to engage in an interview-lack of motivation it is one of the most common characteristics of the person with Schizophrenia.
- Patient with aggressive behavior and destructive behavior.

3.6. Selection Procedure

The purposive comprehensive sampling method was used in the study. The participants were selected from the male and female patient of the indoor ward of the NIMH. The participants were selected by the responsible registered doctor of an inpatient unit of NIMH. According to the purposive comprehensive sampling method allowed the researcher to use their knowledge of the population to judge whether or not a particular sample was representative. The researcher was able to select the participants who will act as an effective representator of that study. Denzin & Lincon (1994) stated that '*purposive sampling allows the researcher to choose the case because it illustrates some feature or process in which are interested to seek out this group, individuals where the process will be studied'.*

The researcher made a list of the indoor patient of the female and male ward and checked all medical information of that patient and they were between the 18-60 years of age and have a diagnosis of schizophrenia which are checked with the registered doctor of NIMH. According to the selection criteria there were six participants included in the study, four were women and two men.

Participants who were selected are diagnosed with, paranoid schizophrenia, Chronic schizophrenia and disorganized schizophrenia. The researcher selects that participant who were participating voluntarily also allowed withdrawing their participation from the study at any time without consequence or giving reason. After that signed consent was gained for data gathering to be audio taped and that was confirmed with the participant at the start of data collection.

Subject no	**Sex**	**Age**
Participant 1	Female	35
Participant 2	Female	27
Participant3	Female	35
Participant4	Female	34
Participant5	Male	30
Participant6	Male	23

Table 3: Participant data

3.7. Field Test

A field test was conducted with 3 participants who were diagnosed with schizophrenia and stayed at the National Institute of Mental Health (NIMH. Before beginning the final data collection, it was necessary to carry out a field test which was helped the researcher to refine the data collection plan. During the interview the researcher informed the participants the aims and objectives of the study, interviewed the each of three participants by using the Occupational questionnaire Smith et al. (1986) to conduct field test. After the field test researcher was observed the participants wanted to say how they performed their activities, how does they were not performed and how much they performed their activity with enjoyment. So the field test helped the researcher to decide to explore time use with time use dimension qualitatively of the person with schizophrenia. So the researcher made a semi-structured questionnaire to conduct the study by using qualitatively and it was made with the conjunction of the Occupational questionnaire (OQ).

3.8. Data collection

Qualitative and quantitative methods of data gathering were use in a complementary manner, which strengthens the reliability and trustworthiness of a study and generates results that are more compatible with the study of human occupation (Carison & Clark 1991). Quantitative data were gathered by using Occupational Questionnaire (OQ) Smith et al. (1986) and a semi-structured interview was used to gather qualitative data, for enabling the triangulation of data and thereby enhancing the dependability, since weakness of any method are compensated by the other method (Depoy & Gitlin 1993). Data were gathered on the participants' wards and took approximately one hour in total. The researcher spent 28 hours in 2 weeks for the data collection.

3.9. Instrument of the data collection

The Occupational Questionnaire:

Self report questionnaire were designed to collect data on a patient use of time in daily activities and how it relates to the patient's volition (Values, Interest and personal causation).OQ was chosen to gather quantitative data its capacity to determine the nature and perceive the quality of time use. All activities are listed, whether the activity is work, daily living tasks, recreation or rest; each

is then rated on the activities interest and value to the subject how well he or she does it. Furthermore, previous publications using the OQ with similar population provided valuable information about its reliability and validity **(**Aubin, Hachey & Mercier 1999). Using the OQ, the participants recorded their time use over the previous 24 hours in half hourly intervals, categorized occupation according to work, daily living task, recreation and rest. Completing the OQ generally stimulated discussion and probing questions elicited in-depth insights regarding the ways in which participants spent their time (Patton 1990).

3.10. Semi-structured interview

The semi-structured interview was conducted from the participants understanding in depth information on time use, how they performed their daily living activities, how important it was and how they enjoyed their activities. The questions were derived from the influence of social and physical environment (Suto & Frank 1994, Heibig 2003a, Farnworth, Nikitin & Fossey 2004). The questions ranged from general inquires– the participant how properly perform the occupation, how much importance an individual has given to the occupation and how much an individual liked the occupation.

3.11. Ethical consideration

Approval was gained initially from the course-coordinator of the Bangladesh Health Professions Institute and the director of National Institute of Mental Health. The process of identifying and approaching potential participant, gained informed consent. Initial contact and obtaining informed consent were facilated by the researcher until they have been given informed consent. Signed consent was gained for the data gathering session to be audio-taped and this was confirmed with the participant at the start of data gathering session. The participant was assured at the start of the data gathering session that they can withdraw from the study at any time without consequence of giving reason.

3.12. Data analysis

Quantitative data

Data from the OQ was analyzed by the descriptive statistical analysis to determine distribution of time use according to - self-care, productivity, leisure, and rest were also calculated according to the perceived competence, value and

enjoyment. Calculated time uses distribution involved the number of half-hourly intervals associated with teach domain and combining the totals for each participants to achieve an overall score. All quantitative data analyzed based on combined scores in order to present an overall picture of time use rather than individual case analysis. Firstly the researcher entered data from OQ and entered the raw data which were represent in the pie of life (Apendix-7) of the participants, calculated it manually and then the data was entered in the Microsoft office excel word and represents the data in the pie chart.

Table 4: 3.13. Occupational related categorized

Category of occupation	Example of activities within category
Self care	Wake up from sleep, brushing, washing, bathing, taking medication, prayer.
Productivity	Child care, doctor attended, voluntary on the hospital, help to others & meal taking.
Leisure	Active leisure- physical exercise, visiting in another ward Passive leisure-reading newspaper, relaxing & thinking.
Socialization	Chat with others in the ward
Rest	Time devoted in sleep, taking nap, or close conjunction with sleep

These occupational-related categorized were derived from the two study. (Pentland, Harvey & Walker 1998, Chapparo & Ranka 1997, p. 4). (Pentland, Harvey & Walker (1998) separate categories for distinguishing passive and active leisure occupations were retained for the study because the appearing predominance of passive leisure in lives with schizophrenia. The researcher used this categorical definition of the occupational performance.

3.14. Qualitative Data Analysis

Qualitative data were analyzed using content analysis. Content analysis is an unobtrusive method and the observer has no effect on the material collected (Fox, Sommer & Sommer cited in Bejerholm, Eklund 2004). At first the researcher organizes the transcript of interviews and other associated materials in a systemic way. The analyses of the data were begun with transcription of the interviews. To analyses the data, the researcher was transcribes the entire interview in to Bangle

by two individual (Who was not present during interview period and also not known about the study aim) from audio-taped player. Audio-taped were transcribes verbatim and this content analysis used the principle (Miles & Huberman cited in stewart and Craik). Then the transcriptions were formulated and gave to the two individual who were good in English in order to transform the data from Bangle to English. The researcher was verifying the accuracy of data by matching both English and Bangle transcription. Following that, the researcher was read it for several times to understand what the participant wanted to say. Furthermore the researcher was listening the audio recorder. Secondly data will organize according to the each participant's interview. This process involved coding, and developing themes in order to organize and establish a coherent and meaningful presentation of the participant's view.

3.15. Strategies to ensure the trustworthiness

Triangulation enhanced the creditability of research by using more than one method to investigate a particular phenomenon (Robson cited in Stewart and Craik 2007). In this study triangulation of data sources involved gathering in wards. Triangulation of data methods was employed by using qualitative and quantitative techniques to provide different perspective on occupational experience on performance (Duffy cited in Stewart and Craik 2007). Instead the all transcripts and corresponding all participants' records were randomly selected by the two senior teachers for confirming their accuracy. Objectivity also checked by the supervisors independently in order to see if statistics and themes are emerged.

Chapter-4 Result

4.1. Quantitative result

Distribution of time use: The result have been categorized into three major sectors analyzed i. e. hours spent on each domain, list of tasks performed in each domain quantitatively, how it related to personal causation, value, enjoyment and their personal causation, value, enjoyment in participation in those activities qualitatively. The overall distribution of time use according to the four occupational domains (self care, productivity, leisure & rest) with their spent hour of the OQ, is shown in figure (1). This simple representation shows that, after wakes up from bed a participants spent the majority of time engaged in rest and leisure occupation and little more dominant in self care activities.

The raw data from occupational questionnaire and represent it on the pie of life charts (Appendix-7) which was conducted from the each participant. That pie of life chart represents the hours Figure-(2) spent in the list of activities that the participant did. This raw data from OQ and that are represented in the pie of life chart pertaining to the nature of the time use were categorized according to the actual occupation identified by the participants (that is occupations actually entered in half hourly interval rather than the broader domains for example washing and toileting, productivity, active leisure, passive leisure, socialization, day time sleep, night sleep) to provide more detailed analysis.

Figure (3, 4, 5, 6) shows that the morning, day time, evening data and night data ware presented on four occupational domains. From the OQ, amount of time participation in each self care activities-wake up from sleep washing and toileting, eating, breakfast and medication, prayer which are showed in figure-(3). Figure-4 shows the productivity rate-on child care, doctor attended, file taking, meal taking, and to others. From the perspective of occupational performance figure-(5) showed that the participant are predominantly engaged in thinking , relax, sitting and lying down on the bed, walking, socialization and rest activity which were also showed in figure-(6).

A typical day at NIMH (with average value of time use)

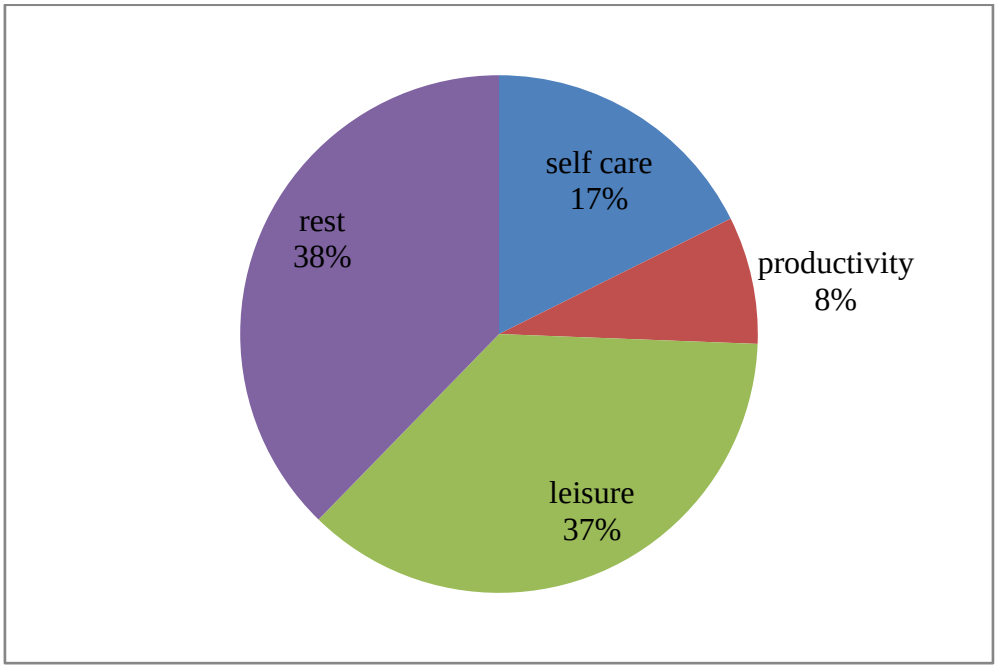

Figure 1: Time use distribution in occupational performance area (Occupational Questionnaire Smith et al. 1986)

Figure-1 shows that the participants engaged in their self care 17% of their activities of daily life. They perform their productive occupation 8%. Participants spent their time in their leisure occupation (37%) which was dominant. They engaged in rest (38%) occupation are more also dominant.

The typical day activities of the NIMH

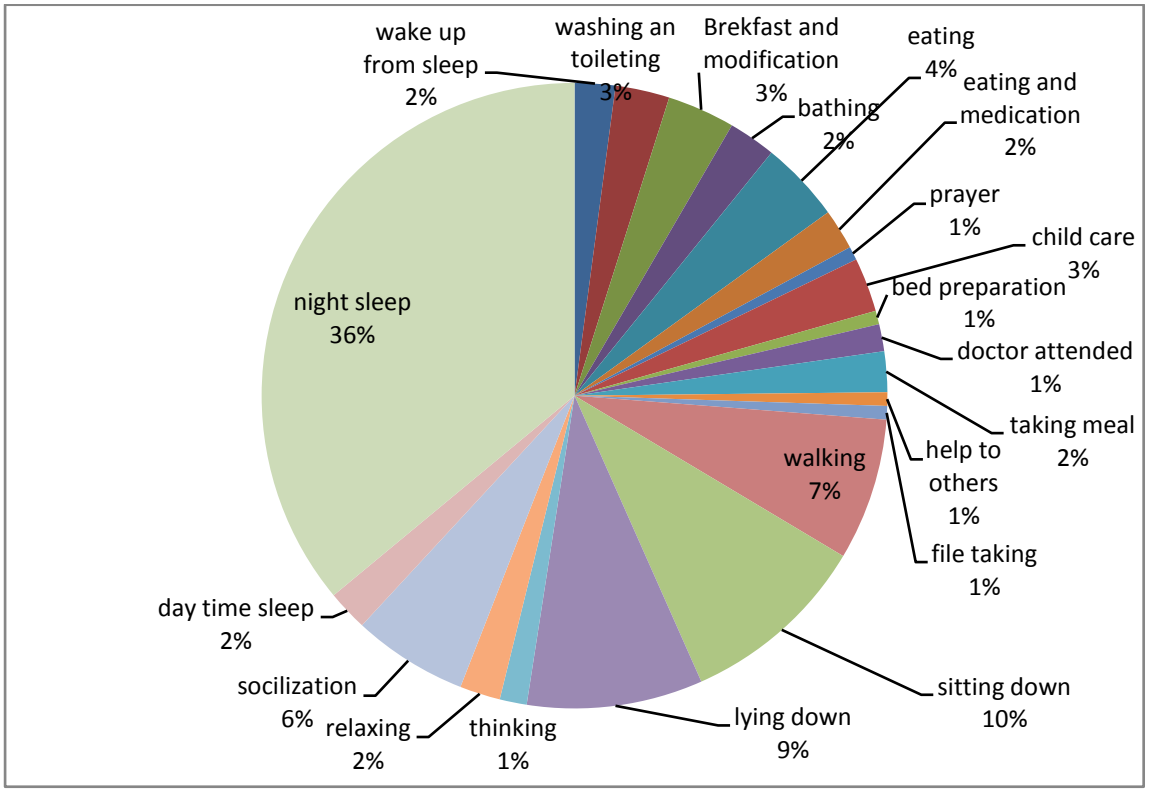

Figure 2: Time spent in major occupational categories.

The main occupation of the participants on the wards were the person spent their time in waking up from sleep (2%), washing and toileting (3%), breakfast and education (3%), bathing (2%), eating (4%), eating and medication (2%) and taking prayer (1%) They were engaging in the child care (3%), doctor attended (1%), taking meals (2%), bed preparation (1%), file taking 1% and help to others (1%).The person spent their time in active leisure-walking in the corridor (7%), passive leisure-sitting down (10%), lying down (9%), relaxing (2%), thinking (1%) make conversation with others as part of socialization (6%). The person performed activity on night sleeping (36%), day time sleep (2%).

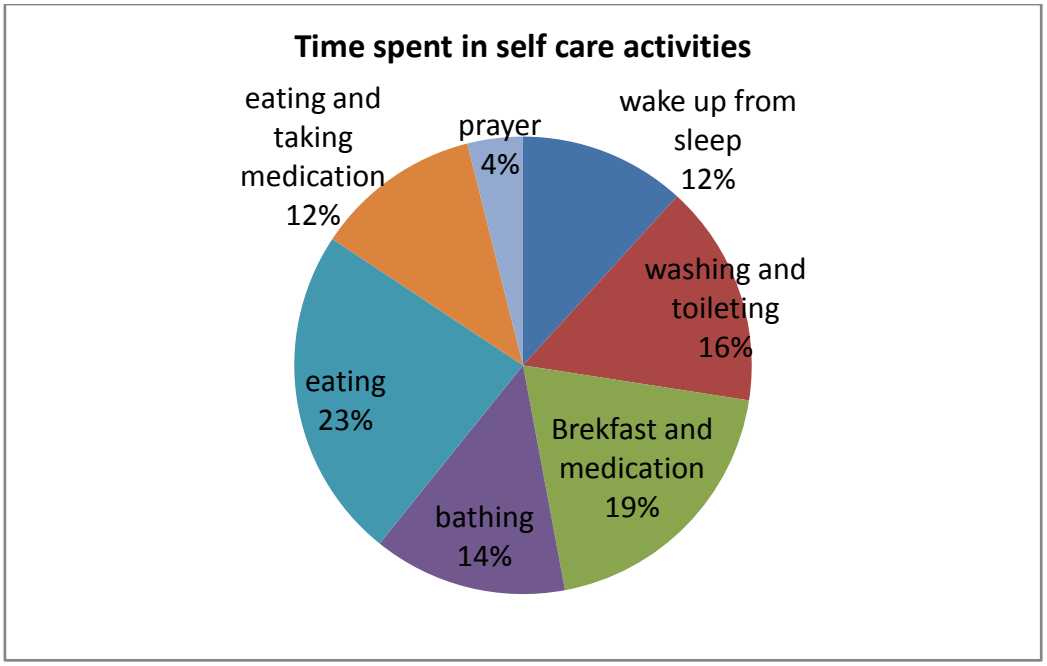

Figure 3: Participants time spent in self care activity

In the self care activity -the person spent their time in wake up from sleep (12%), washing and toileting (16%), breakfast and medication (19%), bathing (14%), eating (23%) and taking prayer (4%), eating and taking medication (12%).

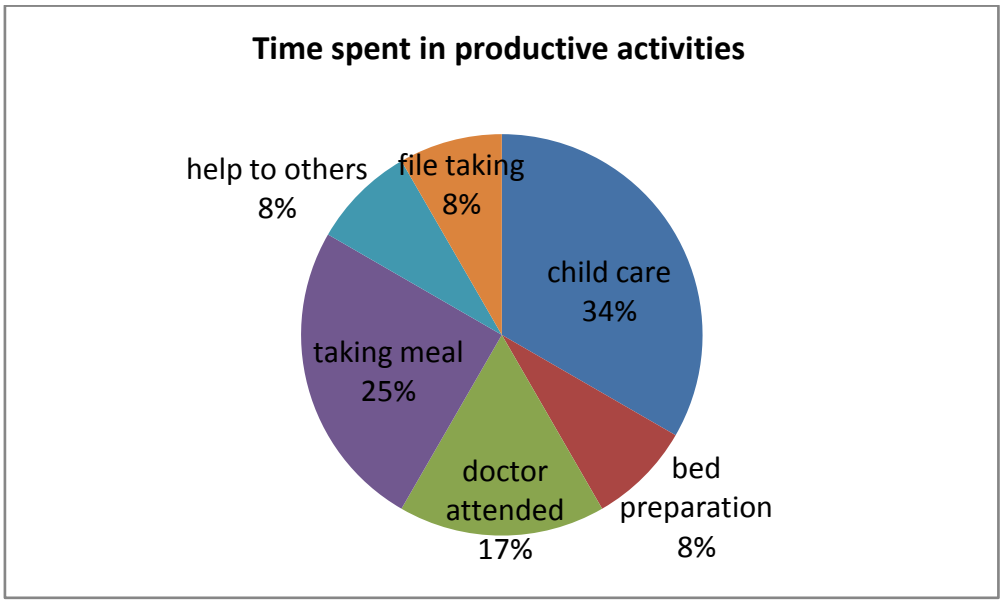

Figure 4: Participants time spent in productivity

The participant spent of their time on day engaging in productivity, for example, sometimes they took care of child (34%), doctor attended (17%), bed preparation (8%), taking meal (25%), helping others (8%) and taking file (8%).

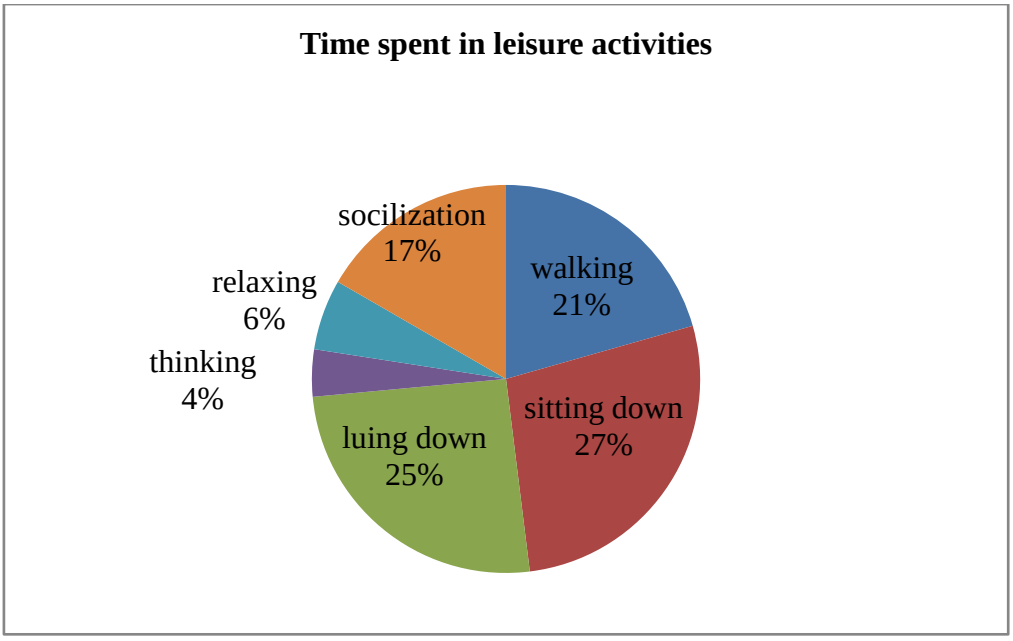

Figure 5**:** Participants time spent in leisure activity

The participants spent their time engaging in leisure activity, they are predominanantly engaged in passive leisure -for example relax (6%), thinking (4%), sitting down (27%), lying down (25%), in active leisure - walking (21%) and making conversation with others in the wards as the part of their socialization (17%).

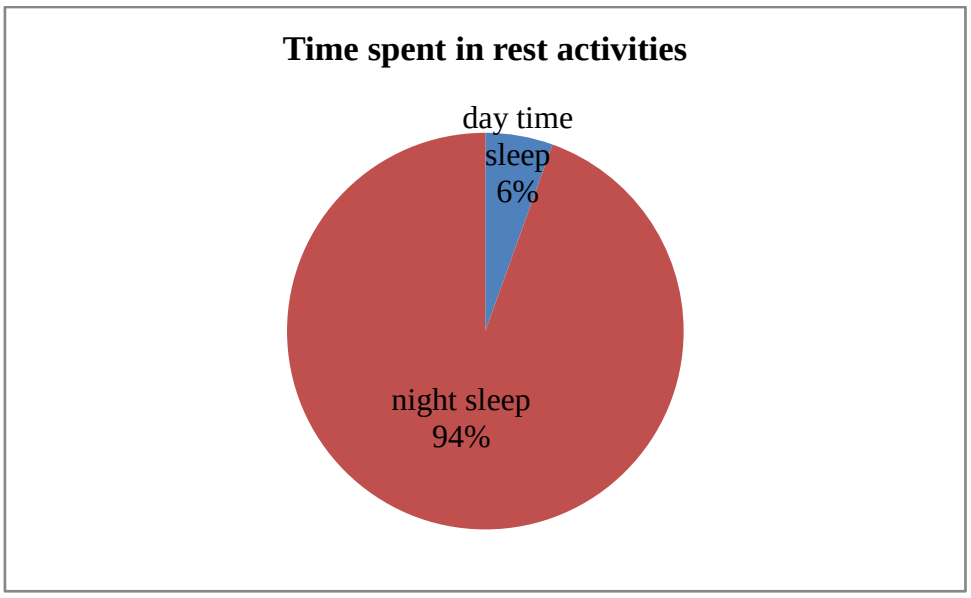

Figure 6: Participants time spent in rest activity

The participant spent of their time a day engaging in rest activity, they spent their time in rest occupation –day time sleep (6%) and night sleep (94%).

4.2. Table: 5 Participants perceived personal causation, value, enjoyment in relation to the time use with occupational performance:

	Personal Causation					**Value**					**Enjoyment**				
	Very well	Well	About Average	Poorly	Very poor	Very Important	Important	Take it or Leave it	Rather not do it	Total waste of time	Very Much like it	Like it	Like it or dislike it	Dislike it	Strongly dislike it
Self Care	n=6					n=6					n=6				
Wake up from sleep	-	2	4	-	-	1	4	1	-	-	-	2	3	1	-
Washing and toileting	-	1	5	1	-	0	5	2	-	-	1	2	2	2	-
Breakfast and medication	-	3	2	1	1	-	3	2	-	1	-	3	3	1	1
Bathing	-	-	5	1	-	-	2	2	-	-	-	-	4	1	-
Eating	-	2	3	-	-	-	2	1	1	-	-	3	3	-	-
Eating and medication	-	3	2	-	-	-	2	-	-	-	-	2	-	1	-
Prayer	-	1	1	-	-	-	2	-	-	-	-	2	-	-	-

	Personal Causation					Value					Enjoyment				
	Very well	Well	About Average	Poorly	Very poor	Very Important	Important	Take it or Leave it	Rather not do it	Total waste of time	Very Much like it	Like it	Like it or dislike it	Dislike it	Strongly dislike it
Productivity	n=6					n=6					n=6				
Child care	1	1	-	-	-	-	1	-	-	-	1	-	-	-	-
Bed preparation	-	2	-	-	-	-	2	-	-	-	-	2	-	-	-
Doctor attended	-	4	1	-	-	-	3	-	-	-	-	3	1	-	-
Taking meal	-	2	-	-	-	1	2	-	-	-	-	1	1	-	-
Help to others	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-
File taking	-	**2**	-	-	-	-	**2**	-	-	-	-	**2**	-	-	-
Leisure															
Walking		3	2	2	-	-	3	3	1	-	-	2	2	2	1
Sitting down		1	4	5	2	-	2	3	3	-	-	1	4	4	1
Lying down		2	4	3	1	-	3	2	2	-	-	3	3	3	1
Thinking		3	3	-	-	-	3	3	-	-	-	3	3	-	1
Relax		2	1	2	-	-	2	2	-	-	-	2	-	2	-
Socialization		3	2	5	-	-	3	1	3	-	-	3	1	4	-
Rest															
Day time sleep	-	2	1	-	-	-	-	1	-	-	-	1	1	-	-
Night sleep	-	3	1	-	-	1	6	-	-	-	-	6	-	-	-

4.3. Table: 5-Occupational performance: Qualitative and Quantitative results

Occupational performance	Personal causation	Value	Enjoyment
Self care	Qualitative: Most of the participants were unable to cope with the environment of the ward, but participants try to spent time in self care tasks performing.	Qualitative : Self care helps the participants to feel refresh, relax, facilate to recover and better confidence.	Qualitative: Participants are not enjoying self care, according to the satisfactory level.
	Quantitative: Very good-0%, Good-28%, About average-60%, Poorly-4%, Very poorly-8%.	Quantitative: Very important-9%, Important-64%, Take it or leave it-23%, Rather not do it-2%, Total waste of time-2%.	Quantitative: Very much like it-7%, Like it-38%, Like it dislike it-38%, Dislike it-15%, Strongly dislike it-2%.
Productivity	Qualitative: Hence there is no activity in the ward; the participants are trying to spent time in engaging in productive occupations.	Qualitative: Participants stated that work is an important aspect of life.	Qualitative: Participants are not enjoying their productive occupation in the ward.
	Quantitative: Very good-19%, Good-77%, About average-4%, Poorly-0%, Very poorly-0%.	Quantitative: Very important-8%, Important-92%, Take it or leave it-0%, Rather not do it-0%, Total waste of time-0%.	Quantitative: Very much like it-21%, Like it-67%, Like it dislike it-12%, Dislike it-0%, Strongly dislike it-0%.

Occupational performance	Personal causation	Value	Enjoyment
Leisure	Qualitative: Time spent in leisure occupations on the ward becomes very boring to pass time passively and having this restricted environment, participants trying to spend their time in actively and making conversation with others.	Qualitative: Participants described conversation with others as very important, it's less important to spend time passively.	Qualitative: Most of the participants are interested to make conversation but not others activities in leisure occupations.
	Quantitative: Very good-22%, Good-42%, About average-31%, Poorly-5% Very poorly-0%.	Quantitative: Very important-0%, Important-28%, Take it or leave it-32%, Rather not do it-29%, Total waste of time-11%.	Quantitative: Very much like it-0%, Like it-21%, Like it dislike it-37%, Dislike it-32%, Strongly dislike it-10%.
Rest	Qualitative: Participants feels anxious while taking rest, participants stated they can't sleep in home as much as they can sleep on the ward.	Qualitative: Participants stated rest is important for every human being.	Qualitative: After sleeping feels interested but not satisfactory.
	Quantitative: Very good-0%, Good-84%, About average-16%, Poorly-0%, Very poorly-0%.	Quantitative: Very important-0%, Important-1%, Take it or leave it-99%, Rather not do it-0%, Total waste of time-0%.	Quantitative: Very much like it-0%, Like it-48%, Like it dislike it-52%, Dislike it-0%, Strongly dislike it-0%.

4.3. Qualitative results

Qualitative result analyzed by the content analysis. Content analysis in an unobtrusive method and the observer has no effect upon the material collected (Fox & Sommer & Sommer cited in Bejerholm, Eklund 2004). During the course of the content analysis, categorized, coding and emergence themes which were related to occupational performance.

There are three main themes are emerged-

Theme: Personal causation for occupational performance

- ***Self care:*** Most of the participants were unable to cope with the environment of the ward, but participants try to spent time in self care tasks performing.
- ***Productivity***: Hence there is no activity in the ward; the participants are trying to spent time in engaging in productive occupations.
- ***Leisure:*** Time spent in leisure occupations on the ward becomes very boring to pass time passively and having this restricted environment, participants trying to spend their time in actively and making conversation with others.
- ***Rest:*** Participants feels anxious while taking rest, participants stated they can't sleep in home as much as they can sleep on the ward.

Theme: The value of occupational performance:

- ***Self care*:** Self care helps the participants to feel refresh, relax, facilate to better recover and provide confidence.
- ***Productivity*:** Participants stated that work is an important aspect of life.
- ***Leisure:*** Participants described conversation with others as very important, it's less important to spend time passively.
- ***Rest:*** Participants stated rest is important for every human being.

Theme: Enjoyment of occupational performance:

- ***Self care:*** Participants are not enjoying self care, according to the satisfactory level.
- ***Productivity:*** Participants are not enjoying their productive occupation in the ward.

- ***Leisure:*** Most of the participants are interested to make conversation but not others activities in leisure occupations.
- ***Rest***: After sleeping feels interested but not satisfactory.

Category-1: personal causation for self care

Coding	P1	P2	P3	P4	P5	P6
Unable to cope the environment	✓		✓	✓	✓	
Unexpected situation in the ward		✓		✓	✓	✓
Poor satisfaction to perform self care	✓	✓			✓	✓
Unable to fulfill the needs by eating		✓			✓	
Taking drugs in times		✓			✓	✓
Having the unexpected situation somebody trying to self care				✓		

Among participants four participants P1, P3, P4 & P5, said that they were unable to cope with the ward environment so they are not performing their self care at their satisfactory level. Unable to cope the environment means they were in habituate, feeling uneasy to match in this ward. The participants P2, P4, P5 & P6 stated that the bathroom are open, so dirty environment and only one water pipe line take long serial for entering the bathroom. On the other hand P4 stated that, *"having this lacking, I am going to this dirty toilet, to wash".*

P2 & P5 stated that they couldn't fulfill their meal needs due to having the same food every day and having a poor amount of food. P5 stated that, he took prayer but not every day due to poor management on the ward. P2, P5 and P6 stated that they took their medication on times.

Category 2: Personal causation for productivity

Coding	P1	P2	P3	P4	P5	P6
Attended to the doctor	✓	✓	✓	✓	✓	✓
Take care of child	✓					
Bed preparation	✓		✓			
Taking meal for eating		✓			✓	✓
Helping others		✓		✓		
Here is nor work					✓	
Volunteer service					✓	✓
Taking prayer but not regularly					✓	

All participants stated that (P1-P6) they attended the doctor regularly. P3 stated that, '*I am maintaining doctor speech carefully', I am maintain all information which doctor gives to me, I have to go home being well'*. P4 stated that '*they are remaining very attentive, when I talk to the doctor'.*

P1 had one child, she cares for her baby very well. P1 and P3 arranged their bed. P1 describes that she preferred her bed, because '*the hospital bed is too small, otherwise, my daughter will get hurt by falling from bed*'. P3 stated that, '*I made my bed because the doctor comes every morning'*. P2, P5 and P6 described that they were taken her meals for themselves.

P2 & P4 stated that they help others voluntarily in the hospital. P2 stated that '*if anyone does not take their meal, I help them by taking the meal for him*. P5 and P6 stated that they collected files and replaced it to the nursing room. P5 stated that, '*I take prayer but not regularly because there is no proper management for praying'*.

Category 3: personal causation for leisure

Coding	P1	P2	P3	P4	P5	P6
Leisure means, lying on bed, sitting down.		✓		✓		✓
Walking in the ward		✓				✓
It's very boring	✓	✓	✓	✓	✓	
Restricted environment					✓	
Conversation with other	✓	✓	✓		✓	
Thinking own self			✓	✓		

P2, P4 and P6 stated that here leisure means lying in the bed; sitting down for a long periods of time is very boring. P6 stated that '*I don't like walking, I don't like it because if the place is open I will feel better*'. P1, P2, P3, P4 and P5 stated that, sometimes it's very boring and tiring to lie down on the ward. P1, P2, P3 and P5 stated that, they make conversation with others. P5 described that, '*sometimes I going other room to talk with other people and also making conversation with my mother than other friends'*. P3 stated that, '*I feel better to talk with someone, I feel very bored to be alone'*. P3 and P4 described that, *'when I think of myself, it is very disgusting than nothing feels good, it becomes worry'.*

Category 4: personal causation for rest

Coding	P1	P2	P3	P4	P5	P6
Sleeping is very well here	✓		✓	✓	✓	✓
Feeling very bad to sleep at day time		✓			✓	
Feeing disturbance here			✓			✓

P1, P3, P4, P4 & P5 –'*I take my rest here*'. P1 described '*I am doing rest 40% of the time, because it's not my home, it's a hospital, I have to maintain a lot'.* P3 described

that '*when I felt sleepy, I sleep*'. P4 described '*I can't sleep in my home as much as, I can sleep here'*. P6 described that, 'I *can't sleep in my home as much as, I can sleep here. P6* describes '*I sleep well'*. P2 and P5 described that *'I lay all day and can't sleep, feel anxious about my home, I can't sleep at night'*. P6 describes, '*I don't like sleeping in the in the day time'*. P3 and P6 said that, '*Sometimes I am disturbed, they don't turn the light off, it's big problem for me'*. P6 described that, '*because of shouting I can't sleep well'*.

Category5: value of self care

Coding	P1	P2	P3	P4	P5	P6
Necessary of self care	✓			✓	✓	✓
Taking medication, getting well fast		✓		✓	✓	✓
Because of abnormality can't maintain self care				✓		
Giving value but unable to do						✓

P1, P4, P5 & P6- *'It is very much necessary to care myself'*. P1 said that self care enhances the feeling of being refreshed and relaxed her mind refresh. P4, P5 and P6 said that, *'if I don't brush, and bath properly, I feel so dirty and I have a bad odor'.* P2, P3 & P6 gives value taking medication getting well fast. P2 describes that giving value to take medication, *'If I don't take medication, I can't recover soon'.* P4 stated that '*Taking medication, because I think when medication enters my body and work perfectly'*. P5 described '*as I am sick, I have to take medication'*. P6 described that '*I take my meal regularly, because I take my meal regularly, because I need to take medication'*. P4 stated that, '*I can't maintain my self -care routine due to my abnormality'.* P6 described that, he gaves value to do self care but unable to do.

Category 6: value of productivity

Coding	P1	P2	P3	P4	P5	P6
Work is very important aspect	✓	✓	✓	✓	✓	✓

Attentive to the doctor, and recovered and go to the home	✓	✓	✓	✓		

Every participant (P1-P6) stated that work is the most important aspect an individual life. P1 described that child care is the responsibility of a mother and talk to the doctor is most important. P1, P2, P3 and p4 stated that 'the doctor will know about me the more I get good treatment and I can go home by recovering fully'.

Category7: Value of leisure

Coding	P1	P2	P3	P4	P5	P6
It's very important to talk with others	✓			✓	✓	
Walking making refresh and fit			✓	✓		✓
Not necessary to do leisure activity		✓				

P1, P4 and P5 stated that, it's very important to talk with others. P5 stated that *'it is impossible to live alone'*. P4 stated that *'to talk with others, to say something, as reply it's feel good'*. P3, P4 & P6 stated that walking helps us to refresh and fit. P3 described that '*walking is important for their body'*. P4 described *'I feel uncomfortable I walk*'. P6 described that, '*by walking I feel refreshed'*. P2 described that, '*leisure is not necessary for me, it would do my household work in this time, there is no work here, and so I spent my time by sleeping'.*

Category8: Value of rest

Coding	P1	P2	P3	P4	P5	P6
Sleeping is very necessary for life	✓	✓	✓	✓	✓	✓

Every participant stated that sleeping is very necessary for life.

Category 9: Enjoyment after performing self care

Coding	P1	P2	P3	P4	P5	P6
Unable to cope get enjoy	✓	✓	✓	✓	✓	✓

P1 described that, '*I enjoy myself care but not fully because many thoughts across my mind'*. P2 described that, 'I *didn't like anything here, so I didn't find like anything here to take care of myself*''. P5 described, 'here *I can't enjoy myself, I can't take myself'*. Participant P6 described that *'I can't enjoy myself there is only one pipeline and a lots of people that's why it is painful for me'*. P4 described '*that there is nothing to enjoy', while taking bath, dirty water falls on m*e'. P3 said that, *'I am not satisfied here,' I am under pressure, I am eating but I have not wish to eat'.*

Category 10: Enjoyment after performing productivity

Coding	P1	P2	P3	P4	P5	P6
Enjoy but not fully enjoyed	✓	✓			✓	

P1 stated *that' I feel tense, I am in hospital and I am sick it's very painful for me'*. P2 stated that, *'I didn't get any pleasure, I didn't like anything'.*

P5 stated that I don't feel good, because there is no work, '*I am a industrious person, that's why I feel too bad here and can't pass time without any work, I feel not good like sitting down, I feel bad to sit all day'*.

Category11: Enjoyment after performing leisure

Coding	P1	P2	P3	P4	P5	P6
Its feels enjoyable during these conversation	✓		✓	✓	✓	

Here is nothing to enjoy		✓		✓		✓
Feels bored		✓				

P1, P3, P4 and P5 stated that, *'it feels good to make conversation with others'*, P1 describes that *'I can collect many things, exchange a lots of things, I may not know many things, I know from here'*. P3 described, '*I like to talk with people I don't like to talk unnecessary'*. P2, P4 and P6 stated that, '*here nothing to enjoy'*. P2 described that*, 'I feel boring, I just wish to get rid of and return to my home'*.

Category 12: Enjoyment After rest

Coding	P1	P2	P3	P4	P5	P6
After sleeping, feels pleasure				✓	✓	✓
Not satisfactory	✓	✓				

P4, P5 and P6 stated that, '*sleeping here feel's good'*. P4 described, *'I enjoy but when no uncomfortable thinking does not appear in my mind'*. P6 described that, '*here one thing to enjoy is sleeping'*. P1 described that, after rest '*I can enjoy do little, but not completely. P2 described, I don't feel peace by sleeping'*.

Chapter-5 Discussion

5.1. Distribution of time use

Time use methodology aims to examine predictors of participation within the people diagnosed with schizophrenia. The findings of the study made the linkage with this study of Farnworth, Nikitin & Fossey (2004) on time use in an Australian secure unit with forensic patients they found that the person with mental illness are predominantly engaged in rest and passive leisure occupation and little more dominant in self care activities. Heibig (2003a) also found in the time study, the qualities of life in the secure hospital are in similar predominance in passive leisure and rest. Suggested on time use studies in the hospital environment generate a picture of restrictive and/or institutional settings depriving people of occupational opportunities (Hayes & Halford 1996, Krupa et al. 2003, Shimitas et al. 2003). In this study the people with schizophrenia apparent smaller engagement in productive, little more dominant proportion of their time in personal care, but engaged greater proportion of their time in leisure and rest occupation.

5.2. Time use distribution in occupational performance

In this study personal care- washing, toileting eating, bathing taking medication, are little more dominant (4.25 hour per day or 17%), activity within 24 hours captured occupation of each participants. In the study the participants productive occupation (8%) (1.3 hour per day) rates are notoriously low among the people with enduring psychiatric disabilities Warner, Crowther et al. (cited in Shimitras, Fossey, Hervey 2003). In this study the researcher found that by the qualitative results participants described that they engaged in smaller proportion in work activities-such as-child care, doctor attended and voluntary service, someone described *'there is no work to do'* but there is a strong evidence that are stated by the Secker, Grove & Seebohm (2001), mental Health services should take a stronger participation in vocational opportunities, guidance and support, for which a better understanding of the barriers to employment and training from service users perspective is essential. But in our Bangladesh perspective at NIMH, there are not present any vocational programme, working opportunity, recreational source and community integration as the common

form of rehabilitation programme for the patient with mental illness. Although NIMH is an institute, it's not a rehabilitation centre.

Work is very necessary to support and facilate engagement in social active leisure occupations. In this present study's results it found that participant spent majority of their day time in occupation in leisure (37%) (8.9 hours per day). The leisure is the characteristics of the persons with schizophrenia Weeder (1986), Suto & Frank (1994), when compared with the general population, they spent as little as 5% spent on passive leisure activities (Juster & Stafford cited in Bejerholm, Eklund 2004). People with schizophrenia participated in predominantly passive forms of leisure which indicate with the relatively physically inactive and unhealthy lifestyle. In addition of the physically inactive and unhealthy lifestyle consequence, a predominance of passive leisure encourages boredom, that results in imbalanced person's capacities and influence existing skill and this may not support the development of social and active forms of leisure. In this study the participants engaged in the social occupation (6%) as well as socialization. To support this Davidson et al. (cited in Shimitras, Fossey & Hervey 2003) stated that befriending and peer support can enhance the participation in these forms of occupation, this is important if quality of life and psychological outcomes for people diagnosed with schizophrenia. In the present study some participants stated that their occupational performances are being disturbed due to their abnormal thinking. It may because of positive and negative symptomalogy of schizophrenia. In contrast, positive and negative symptomalogy are poor predictor on the participation according to (Hervey et al. 2006). It might be assumed that positive symptoms are remediate by the anti-psychotic drugs. It was suggested that Hervey et al. (1996) more than two of participants in the larger sample study were experiencing positive symptoms. Negative symptoms are predictive of participation in occupation, given the emphasis is placed on the adverse functional consequence of psychopathology, negative symptoms are prominent (Cook & Razzano cited in Hervey, Fossey, Jackson & Shimitras 2006).

5.3. Perceived Personal causation for the occupational performance

The majority of the participant time was spent engaged in occupation well, about average to perform their self care activities according to the OQ. From the semi structured interview, however indicated that the participants were unable to cope with

the ward environment so they are not performed their activity at the satisfactory level. The majority of the participants stated that they performed their productivity well according to the qualitative and quantitative results. The greater proportion of the participants explain that they are performed their leisure very poorly. In the qualitative results participants explained that sometimes it was very boring and tiring to pass time in such activity like sitting and lying down on the bed. According to the OQ and semi-structured questionnaire majority of participants performed their sleep well.

5.4. Perceived value for the occupational performance:

The majority of the participant time was spent in self care activities that they felt important. By the semi-structured questionnaire participants stated that '*it's very much necessary to care myself".* The greater proportion of the participant's time was spent in productive activities that they felt important (according to the OQ). In the semi-structured questionnaire participants found that '*It's is the most important aspect of an individual life'.* The participant's time was spent in leisure activities that they felt important and take it or leave it. In the semi-structured questionnaire the participants gave to the value of such activity (walking, gossiping with others). Lesser participants described that '*leisure is not very important for me'.* The majority stated rest is very important and it's very necessary for every human being according to the OQ and semi-structured questionnaire.

5.5. Perceived enjoyment for the occupational performance

Minimum proportion of the participant's time was spent in self care activities that they like and like it or dislike it. In the semi- structured questionnaire response, however the participants were not enjoying their self care due to different causes. Minimum proportion of the participant's time was spent in productive activities that they like and like it or dislike it. From others portion (semi-structured questionnaire) participants '*I don't like it, because there is no work'.* Minimum proportion of the participant's time was spent in leisure activities that they liked and liked it or disliked it. In the semi-structured questionnaire they were enjoying the some activity (chat with other, walking). The majority of participant stated doing rest that they liked and liked it or disliked it as well as same in the semi-structured questionnaire.

All those three component supports to the Crist et al.(Cited in Bejerholm & Eklund 2004) individual with mental illness problems shown that they are less personal

causation, enjoyment, and importance from work than working individual without mental health problems. Some participant are stated that they are perform their occupation properly, because they given value on 'release from mental illness' and wants to back into their home and return to their productive occupation, felt enjoyment and purposeful, Which supports the Kielhofner (cited in Stewart and Craik 2007) study.

> *"We want to competent at doing things we value. We tend to find enjoyable those things we do well and dislike those things that overtax us. We suffer when we can't perform well the things about which care deeply"*.

5.6. Environmental influence

In this study most of the participants are unable to adjust to the environment because they are not coping with the hospital environment of the NIMH. Some participant stated that a restricted environment limited and diminished choice Molineux & Whiteford (1999), autonomy and less likely to valued. It was suggested that hospital ward and institutional environment may facilate the passive occupational situation which are the most common situation in our NIMH environment.

According to Hockings (cited in Bejerholm & Eklund 2004) says that situation like passive leisure occupation may decrease the opportunities to develop. According to Strong et al. (cited in Bejerholm & Eklund 2004), the quality of a person's experience determined by the outcome of the person-environment-occupation transaction. If environment are well organized it will give the structure of life and facilitate the occupational performance. The environmental factors are a hindrance or a help for acting involved in a activities (Corcoran & Gitlin, Neville et al. cited in Bejerholm & Eklund 2004). Arranging and reshaping the environment would most likely shape opportunities for promoting occupational performance. In this present study, they are not only triggering the environmental influence but rather than within the person, lack of basic needs, immediate life needs, a wish for satisfaction or wanting to escape the reality.

5.7. Restriction

Most time use studies in secure settings describe environmental restriction having a negative impact on occupational behavior, Schindler (cited in Bejerholm & Eklund 2004).There are individual differences in the degrees of perceived restriction, in this

present study there are two participants expressing the strong views about a lack of autonomy.

5.8. Other considering influence on time use

The participants in this study spent little time in performing these personally satisfying activities. Such as –rest, chat with others and doctor attended. Clark (1997) argued that a small amount of time spent in activities may be far more determinant of health and well being than more time spent in minimally to moderately satisfying activities. In this study the four participants stated *'it's not my home, it's a hospital, so I unable to cope in the environment'.* Its support to by Robinson (1997) study, homeless people in a similar situation said that there were no such things as time, because the activities they performed in meant living outside society. Whiteford (2005) suggested that the most significant disruption on time use caused by permanent change of location, through isolated living circumstances, unemployment, imprisonment, refuggeeism and cultural restriction.

5.9. Limitation of the study

- The Researcher chooses a sample number six of participants, due to recruitment difficulties being involved.
- This study did not consider the difference in gender in relation to time use and occupational performance. There might be difference in how women and men with schizophrenia use their time.
- Whether or not a person with schizophrenia is capable of reliably filling in the self report instrument and participating in the semi-structured interview is a relevant issue to discuss. Cognitive impairments Spaulding et al.(cited in Bejerholm & Eklund 2004), flattening of a affect and a feeling of alienation (Gerhardsson & Jonsson cited in Bejerholm & Eklund 2004) may influence the ability to identify recent experience of everyday life by means of questionnaire.
- Another limitation in the study was there are no prior hypothesis is established.

5.10. Strength of the study

Clinical experience, however have indicate the self report questionnaire and semi-structured interview constitute an appropriate and useful method when assessing the

occupational performance among people with schizophrenia. Both qualitative and quantitative methods of data gathering were used in a complementary manner, which strengthens the reliability and trustworthiness of the study and generates results that are more compatible with the study of human occupation (Carlson & Clark cited in cited in Stewart & Craik 2007).

5.11. Implication for occupational therapy

- This study create a further impetus/forward motion to calls for mental health policies and acquired some accessibility to ordinary work facilities, enhance proper leisure and education for people with enduring mental illness.
- In this study the researcher found those participants are more engaged in passive leisure and rest occupation. Daily environmental disruption and lack of meaningful occupational opportunity may caused frustration, compounded the participant sense of powerlessness and diminished their sense of personal value. In this situation an occupational therapist arranging and reshaping the environment and also facilate the opportunities for promoting the occupational performance among the participant. It should remind that when an occupational therapists work with the group of clients, diminishing the gap between the clients adaptive capacity and environmental demands (Schkade & Schultz cited in Bejerholm, Eklund 2004).
- Occupational therapist may take an active roles in developing innovative approach to creating an social environments and investigating participation restriction for people with mental illness that provide such people with greater access to occupational opportunities, choice and supports (Roberio et al. , Chugg & Craik cited in Shimitras, Fossey, Hervey 2003) to sustain healthier lifestyle.

5.12. Conclusion

This studies explored that how patient with schizophrenia use their time at NIMH. In conclusion the in this study participant spent most of the activities in sitting, lying down and rest occupation. Few occupational situations in the institution, facilate the person with mental illness to do more passive occupation. This situation may results in boredom, powerlessness and frustration. There remains a need for better understanding of the relationship between mental illness, occupation and the environment. In this studies found that, the person time use are not only influence by

the mental disabilities by only impacted by the lack of drives, satisfaction, occupational opportunities and environment limitation. The structure occupational situation and maintained it in a regulatory manner as a structure daily, this will may effect on a time use pattern. In the Occupational Therapy point of view it would be probably be important to help reshape the environment and help regain roles that involve interacting with the outside world.

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Appendix 1

To
The Course Coordinator
Department of Occupational Therapy
Bangladesh Health Professions Institute
CRP- Chapain ,Savar, Dhaka-1343

Subject: Prayer for seeking permission to conduct the study for fulfillment of final year of B. Sc in Occupational Therapy course.

Sir,
With due respect, I beg to state that I am a student of 4th year, enrolling in Bachelor of Science in Occupational Therapy at Bangladesh Health Professions Institute of Center for the Rehabilitation of the Paralyzed (CRP). At this stage I am intending to do dissertation as part of my Course module which is entitled "An exploration of how patient with schizophrenia use their time in National Institute of Mental Health in Bangladesh"

Therefore, pray and hope that you would be kind enough to permit to conduct the study and thus helping to meet the partial fulfillment of the Bachelor of Science Occupational Therapy.

Yours sincerely,

Paprhi Sarkar
Paprhi Sarkar
4th year, Bachelor of Science in Occupational Therapy
Bangladesh Health Professions Institute
CRP- Chapain, Savar, Dhaka-1343

Approved by	**Comments & Signature**
Course Coordinator Md. Julker Nayan Lecturer & Course Coordinator Department of Occupational Therapy BHPI, CRP-Chapain, Savar, Dhaka -1343	Approved. and Good luck. 1.11.11
Research supervisor Nazmun Nahar & Md. Mosayed Ullah Lecturer of Occupational Therapy Department of Occupational Therapy BHPI, CRP-Chapain, Savar, Dhaka -1343	It may be allowed to conduct the study as per course coordinator's approval. Good Luck. 01.11.11

Appendix 2

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

Ref: CRP-BHPI/4866 /09/11 Date : September 28, 2011

To
The Director
National Institute of Mental Health (NIMH)
Agargaon, Dhaka

Subject: **Regarding the permission to collect data for the research of 4th year Occupational Therapy student.**

Dear Sir,
With due respect we would like to state that **Ms. Papri Sarkar** is a student of 4th year, enrolling in Bachelor of Science in Occupational Therapy (Academic session 2007-8, Class Roll 9) at Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP). As part of her course, she has to conduct a research study to fulfill the partial requirement of the degree of B. Sc in Occupational Therapy affiliated to the University of Dhaka. The title of the research is ***"An exploration of the time use of patient with schizophrenia use their time in National Institute of Mental Health of Bangladesh".*** She has already got the permission from the relevant committee of BHPI to conduct the study. We are also to let you know that during data collection of the study ethical consideration will be strictly maintained by the student.

So, we are looking forward to having your cooperation for collecting the information from your reputed institution. We would like to assure that anything of the research project will not be harmful for your institution. Thank you very much in advance for your assistance in this regard.

Sincerely Yours,

Md. Julker Nayan
Course-coordinator and Lecturer
Department of Occupational Therapy
BHPI, CRP

Prof. Dr. M A Quader
Principal
BHPI, CRP

Attachments:
1. Permission letter of the Department of Occupational Therapy
2. Proposal of the research project.

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ, ফোনঃ ৭৭১০৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্সঃ ৭৭১০০৬৯
CRP-Chapain, Savar, Dhaka-1343, Tel: 7710464-5, 7741404, Fax: 7710069, E-mail: contact@crp-bangladesh.org; Website: www.crp-bangladesh.org
BHPI-Mirpur Campus, Plot-A/5, Block-A, Section-14, Mirpur, Dhaka-1206, Bangladesh, Tel: 8020178, 8053662-3, Fax: 8053661

Appendix 3

সম্মতিপত্র

বিষয়ঃ বাংলাদেশ জাতীয় মানসিক স্বাস্থ্যকেন্দ্রে সিজোফ্রেনিক রোগীরা কিভাবে তারা তাদের সময় অতিবাহিত করেন।

.....(গবেষকের নাম) জিজ্ঞাসা করবেন.. .....
.....(রোগীর নাম),গবেষণায় অংশগ্রহণ কারী সিজোফ্রেনিক রোগীরা বাংলাদেশ জাতীয় মানসিক স্বাস্থ্যকেন্দ্রে কিভাবে সময় অতিবাহিত করেন। অংশগ্রহণকারীরা এই গবেষণার বিস্তারিত তথ্য সম্পর্কে অবগত থাকবেন, অংশগ্রহণকারীরা তাদের মতামত প্রত্যাহার করার অধিকার রাখেন এবং কোন কারন দর্শানো ছাড়া অংশগ্রহণকারীরা এ প্রকল্প থেকে রহিত থাকতে পারেন।

এই গবেষণায় প্রাপ্ত তথ্য সম্পূর্ণভাবে গোপনীয় রাখা হবে এবং উক্ত অংশগ্রহণকারীকে ব্যক্তিগতভাবে গবেষণার ফল প্রকাশের সময় চিহ্নিত করা হবে না।

যদি অংশগ্রহণকারীদের এই গবেষণা সম্পর্কে কোন ধরণের জিজ্ঞাসা বাদ থাকে, গবেষক .....প্রশ্নাবলির উত্তর প্রদানে বাধিত থাকবেন।

আমি .....উপরে বর্ণিত গবেষণায় অংশগ্রহণে সম্মতি জ্ঞাপন করছি।

অংশগ্রহণকারীর স্বাক্ষর.....তারিখ .....

অংশগ্রহণকারীর নাম .....তারিখ.....

গবেষকের স্বাক্ষর.....তারিখ ... .

গবেষকের নাম.....তারিখ.....

Appendix 4

Consent form

Title: To explore how patient with schizophrenia use their time at psychiatric ward in National Institute of Mental Health in Bangladesh (NIMH).

…… (Name of the investigator) has asked …….. (Name of client) to take part in a research study to explore how patient with schizophrenia use their time in National institute of Bangladesh at psychitric ward.

The participant of the study is a Schizophrenic patient of the psychiatric ward in National Institute of Mental Health (NIMH), Dhaka, Bangladesh. The participant has to present to convey some information about their time use at psychiatric ward.

The participant has been informed of the details of this research project and the participant has right to withdraw consent and discontinue participation from the research project without giving reason and also agreed with the interview will take by the tape recorder.

The information given by the participant will remain confidential and …….. (Researcher) will not be personally identified in any publication containing the result of the study.

If the participant have any concerns and question about my research project, the……. (Researcher) will be available to answer this sort of question.

I am ……..is properly informed about the study and agreed to participate in study.

Participant's signature……Date ….…….
Participant's name…….
Researcher's signature……..Date……..
Researcher's name……..

Appendix 5

OCCUPATIONAL QUESTIONNAIRE

Developed by N. Riopel Smith with assistance from G. Kielhofner and J. Hawkins Watts (1986).[1]

INSTRUCTIONS:

In this questionnaire you will be asked to record your usual daily activities, and to answer some questions about these activities.

PART ONE:

Please think about how you have been spending your days the past few weeks. Try to decide what you do on a usual weekday (Saturday - Thrusday).Using the worksheet that begins below, record your activities from the time you wake up. Each row represents a half hour. For each half hour record the main activity that you would be doing during that half hour. An activity can be anything from talking to a friend, to eating, to bathing. If you do an activity for longer than a half hour, write it down again for as long as you continue to do that activity.

PART TWO:

After you have listed your activities, answer all four of the questions for each activity by circling the number of the most appropriate answer. Notice that the questions ask you to consider whether your activities are work, daily living tasks, recreation, or rest, and to consider how well you do the activities, how important they are to you, and how much you enjoy them. In the first question, work does not necessarily mean that you are paid for the activity. Work can include productive activities that are useful to other people, like volunteering at a hospital. Daily living tasks area activities that are related to your own self care, such as taking meal, taking bath. Rest includes taking a nap and not doing anything in particular. Even if a question does not seem appropriate for some of your activities, please try to respond to each one as accurately as possible. Your answers to every question are important.

This instrument was first published in:

Smith, N.R, Kielhofner, G & Watts, J.H 1986, 'The relationships between volition, activity pattern, and life satisfaction in the elderly', American Journal of Occupational Therapy, 4 0, 278-283.

Occupational Questionnaire

Developed by N, Riopel Smith with assistance from G.Kielhofner and J.Hawkins Watts (1986).

Today's date: ……

Name: ……

Age: ……

Typical activities The half hour beginning at-	Question-1 I consider the activity to be: 1. Self care 2. Productivity 3. leisure 4. Rest	Question-2 I think I do this activity: 1. Very well 2. Well 3. Average 4. Poorly 5. Very poorly	Question- 3 For me this activity is: 1. Extremely important 2. Important 3. Take it or leave it 4. Rather not do it 5. Total waste of time	QUESTION 3 For me this activity is: 1. Very much like it 2. like it 3. like it or dislike it 4. dislike it 5. strongly dislike it
5:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

7:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
10:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
10:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
11:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
11:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
12:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
12:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
1:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
1:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

6:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
10:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
10:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
11:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
11:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Appendix 6

অকুপেশনাল প্রশ্নপত্র

ডেভেলাপড বাই ন,রিপড সিমথ উইথ আসিসট্যানস ফ্রম কেইলহফনার অ্যান্ড য্যা হওকিন্স ওয়াটস(১৯৮৬)

এই প্রশ্নপত্র আপনি আপনার সচরাচর প্রত্যাহিক জীবনের কার্যবলি তালিকাভুক্ত করবেন এবং এই কার্যক্রম সম্পর্কে কিছু প্রশ্নের উত্তর দিবেন।

অংশ-১

বিগত সপ্তাহের দিনগুলো আপনি কিভাবে অতিবাহিত করেছেন,এবং সিধ্যান্ত উপনিত হন আপনি আপনার প্রত্যাহিক দিনগুলি কিভাবে অতিবাহিত করেন তা নিম্নোক্ত ওয়ার্কসিট উল্লেখ করেন। আপনি ঘুম থেকে উঠা শুরু করে প্রত্যাহিক কাজগুলো কিভাবে করেন তা এই নিম্নোক্ত ওয়ার্কসিট উল্লেখ করেন। প্রত্যেকটা কলাম আধা ঘণ্টা করে নির্দেশ করে। এই সময়ে আপনি আপনার প্রধান কাজটি এখানে উল্লেখ করেন। কাজটি হতে পারে- বন্ধুর সাথে কথা বলা, খাওয়া, বিশ্রাম নেওয়া, ওয়ার্ড এ কাজ করা ইত্যাদি। যদি আপনি আধা ঘণ্টার বেশি সময় ধরে কাজ করেন তবে আপনি কত সময় পর্যন্ত করেন সময়টুকু উল্লেখ করবেন।

অংশ -২

আপনার কাজগুলোর তালিকা হয়ে যাবার পর সবচেয়ে উপযুক্ত উত্তরটিতে গোল দাগ দিয়ে প্রত্যেকটি কাজের ৪ টি প্রশ্নের উত্তর দিন।

লক্ষ্য করুন, যে প্রশ্নগুলো আপনাকে করা হবে সেটা হতে পারে আপনার দৈনন্দিন জীবনের কোন কাজ, বিনোদন অথবা বিশ্রাম এবং কাজগুলো আপনি কত ভালভাবে করেন এবং আপনার কাছে কতটুকু গুরুত্বপূর্ণ এবং আপনি কতটা উপভগ করেন। । ১ম প্রশ্নে কাজগুলো অপরিহার্যভাবে এই অর্থ প্রকাশ করেনা যে এই কাজগুলো করার জন্য আপনাকে পরিশোধ করা হবে। কাজটা উৎপাদনশীল কর্মকাণ্ড হতে পারে যেটা অন্য মানুষকে সাহায্য করে যেমনঃ হাসপাতালে স্বেচ্ছাসেবক হিসেবে কাজ করা। প্রাত্যাহিক কাজকর্মগুলি এমন যে এগুলি আপনার নিজস্ব সতর্কতার সাথে সম্পর্কযুক্ত, যেমন-সাংসারিক কাজকর্ম এবং কেনাকাটা করা। দিনে অল্প কিছুক্ষন ঘুমানো এবং বিশেষভাবে কোন কিছু না করা বিশ্রামের অন্তরভুক্ত। এমনকি প্রস্নগুলি যদি আপনার কাজকর্মের সাথে উপযুক্ত মনে নাও হয় দয়া করে প্রত্যেকটি সম্ভাব্য সঠিক উত্তর দেওয়ার চেষ্টা করুন। আপনার প্রত্যেকটি প্রশ্নের উত্তর দেয়া গুরুত্বপূর্ণ।

অকুপেশনাল প্রশ্নপত্র

আজকের তারিখঃ.....

নামঃ.....

বয়সঃ.....

সাধারন কাজকর্ম শুরুর আধাঘণ্টার জন্য	প্রশ্ন- ১ আমি বিবেচনা করি এই কাজটি হবেঃ ১।প্রত্যাহিক কাজকর্ম ২।উৎপাদনক্ষম ৩।অবসর সময় ৪।বিশ্রাম	প্রশ্ন- ২ আমি মনে করি আমি এটি করিঃ ১।খুব ভালভাবে ২।ভালভাবে ৩।মটামুটিভাবে। ৪।খারাপভাবে ৫। খুব খারাপভাবে	প্রশ্ন -৩ আমার জন্য এই কাজটি হলঃ ১।অতি গুরুত্বপূর্ণ ২।গুরুত্বপূর্ণ ৩।গ্রহন অথবা ত্যাগ করা ৪।না করলেও চলে ৫।সম্পূর্ণ সময়ের অপচয়	প্রশ্ন -৪ কাজটি কতটুকু উপভোগ করেন ১।খুব পছন্দ করেন ২। পছন্দ করেন ৩।পছন্দও করেন না আবার অপছন্দও করেন না ৪।অপছন্দ করেন ৫।খুব অপছন্দ করেন
সকাল ৫ টা	১ ২ ৩ ৪	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫
সকাল ৫.৩০	১ ২ ৩ ৪	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫
সকাল ৬ টা	১ ২ ৩ ৪	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫
সকাল ৬.৩০	১ ২ ৩ ৪	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫
সকাল ৭ টাঁ	১ ২ ৩ ৪	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫	১ ২ ৩ ৪ ৫

সকাল ৭.৩০	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ৮ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ৮.৩০	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ৯টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ৯.৩০	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ১০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ১০.৩০	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ১১ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সকাল ১১.৩০	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
দুপুর ১২ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫

সাধারন কাজকর্ম শুরুর আধাঘণ্টার জন্য	প্রশ্ন- ১ আমি বিবেচনা করি এই কাজটি হবেঃ ১।প্রাত্যাহিক কাজকর্ম ২।উৎপাদনক্ষম ৩।অবসর সময় ৪।বিশ্রাম	প্রশ্ন- ২ আমি মনে করি আমি এটি করিঃ ১।খুব ভালভাবে ২।ভালভাবে ৩।মটামুটিভাবে। ৪।খারাপভাবে ৫। খুব খারাপভাবে	প্রশ্ন -৩ আমার জন্য এই কাজটি হলঃ ১।অতি গুরুত্বপূর্ণ ২।গুরুত্বপূর্ণ ৩।গ্রহন অথবা ত্যাগ করা ৪।না করলেও চলে ৫।সম্পূর্ণ সময়ের অপচয়	প্রশ্ন -৪ কাজটি কতটুকু উপভোগ করেন ১।খুব পছন্দ করেন ২। পছন্দ করেন ৩।পছন্দও করেন ন আবার অপছন্দও করেন না ৪।অপছন্দ করেন ৫।খুব অপছন্দ করেন
দুপুর ১২.৩০	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বেলা ১.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বেলা ১.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বেলা ২.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বেলা ২.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বেলা ৩.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বেলা ৩.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বিকাল ৪.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বিকাল ৪.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
বিকাল ৫.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫

বিকাল ৫.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সন্ধ্যা ৬.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সন্ধ্যা ৬.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সন্ধ্যা ৭.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
সন্ধ্যা ৭.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ৮.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ৮.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ৯.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ৯.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ১০.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ১০.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ১১.০০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫
রাত ১১.৩০ টা	১২৩৪	১২৩৪৫	১২৩৪৫	১২৩৪৫

Appendix 7

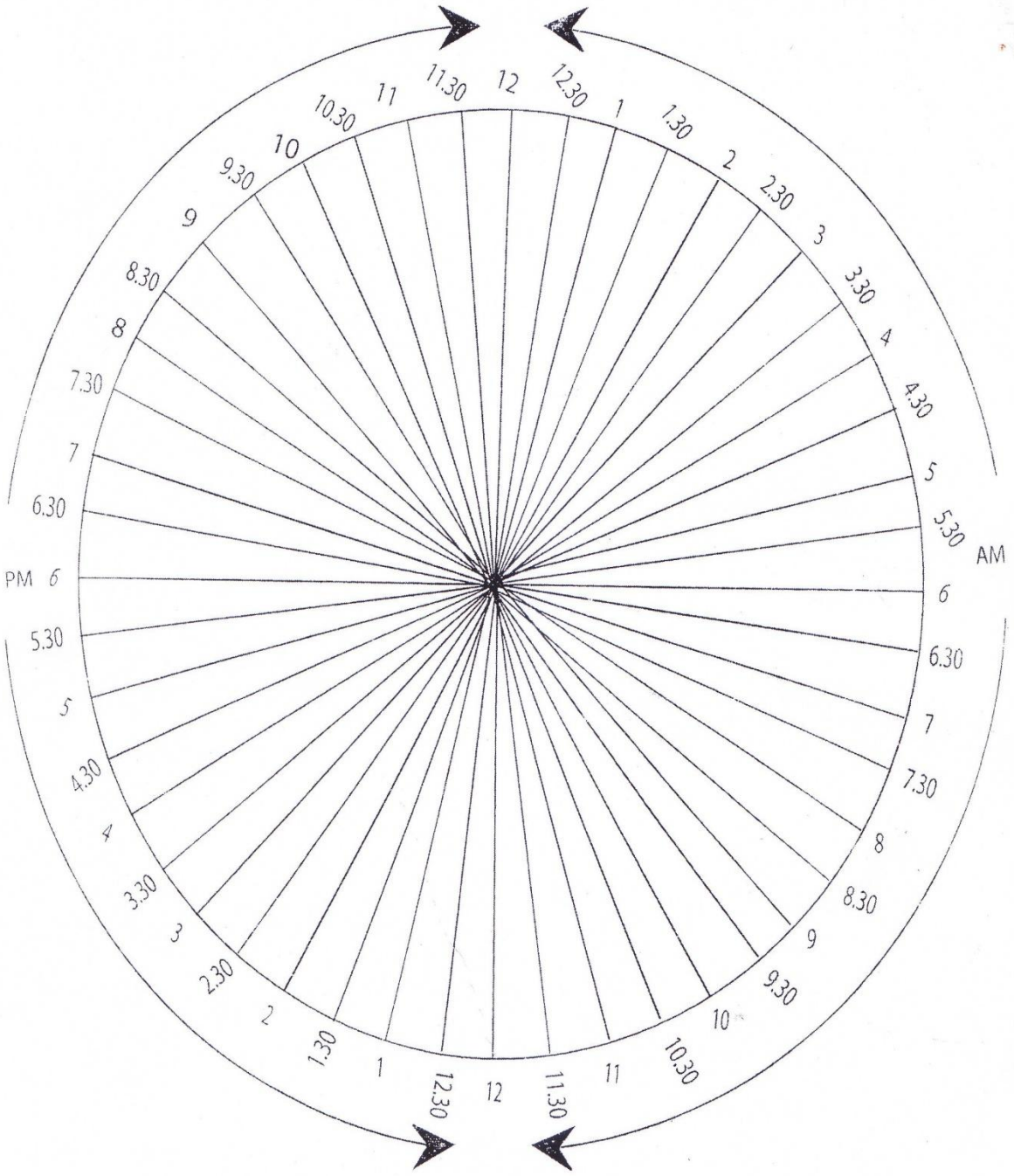

Figure: Pie of Life

Appendix 8

Questionnaire

1. What do you think, do you perform your self care (taking brush, eating bathing, dressing and taking medication etc) in your everyday life? Would you please describe it?
2. What do you think, how self care is an important part in your daily life? Would you please describe it?
3. What do you think, do you feeling interest to perform your self care at NIMH?
4. What do you think, do you perform your productivity (take care of child, attended to the doctor, ward activities, volunteer service in the hospital) in everyday life? Would you please describe it?
5. What do you think, how productivity is an important part in your daily life? Would you please describe it?
6. What do you think, do you feeling interest to perform your productivity at NIMH?
7. What do you think, do you perform your leisure (physical exercise, thinking, relaxing, chat with others, and doing nothing) well in everyday life? Would you please describe it?
8. What do you think, how leisure is an important part in your daily life? Would you please describe it?
9. What do you think, do you feeling interest to perform your leisure at NIMH? Would you please describe it?
10. What do you think, do you perform your rest (taking nap, sleep) in your everyday life? Would you please describe it?
11. What do you think, how rest is an important part in your daily life? Would you please describe it?
12. What do you think, do you getting interest to perform your rest activity at NIMH? Would you please describe it?

Appendix 8

প্রশ্নপত্র

১) আপনি কি এন, আই, এম, এইচ আপনার নিজের যত্নের কজগুলো (যেমনঃ ব্রাশ করা, খাওয়া-দাওয়া করা, গোসল করা, ঔষুধ সেবন করা) সম্পাদন করতেছেন? অনুগ্রহ করে ব্যাখ্যা করবেন

২) আপনার দৈনন্দিন জীবনে, নিজের যত্নের প্রয়োজনীয়তা কতটুকু আছে বলে আপনি মনে করেন?

৩) আপনি এই হসপিটালে নিজের যত্নের কাজগুলো করে কতটুকু উপভোগ করেন বলে আপনি মনে করেন?

৪) আপনি কি এন, আই, এম, এইচ, আপনার কাজগুলো (যেমনঃ ডাক্তারের সাথে দেখা করা, সেচ্চাসেবা হিসেবে হসপিটালে কাজ করা ইত্যাদি) সম্পাদন করতেছেন? অনুগ্রহ করে ব্যাখ্যা করবেন

৫) আপনার দৈনন্দিন জীবনে, উপরিউক্ত কাজগুলো করার প্রয়োজনীয়তা কতটুকু আছে বলে আপনি মনে করেন?

৬) আপনি এই হসপিটালে উপরিউক্ত কাজগুলো করে কতটুকু উপভোগ করেন বলে আপনি মনে করেন?

৭) আপনি কি এন, আই, এম, এইচ, আপনার অবসর সময়ের কাজগুলো (যেমনঃ শারীরিক ব্যায়াম করা, সাচ্ছন্দ করা , অন্যদের সাথে কথা বলা ইত্যাদি) সম্পাদন করতেছেন? অনুগ্রহ করে ব্যাখ্যা করবেন

৮) আপনার দৈনন্দিন জীবনে, উপরিউক্ত অবসর সময়ের কাজগুলো করার প্রয়োজনীয়তা কতটুকু আছে বলে আপনি মনে করেন?

৯) আপনি এই হসপিটালে অবসর সময়ের কাজগুলো করে কতটুকু উপভোগ করেন বলে আপনি মনে করেন?

১০) আপনি কি এন, আই, এম, এইচ, বিশ্রাম কাজগুলো (যেমনঃ সামান্য নিদ্রা নেওয়া, ঘুমানো) সম্পাদন করতেছেন? অনুগ্রহ করে ব্যাখ্যা করবেন

১১) আপনার দৈনন্দিন জীবনে, উপরিউক্ত বিশ্রাম কাজগুলো করার প্রয়োজনীয়তা কতটুকু আছে বলে আপনি মনে করেন?

১২) আপনি এই হসপিটালে উপরিউক্ত বিশ্রাম কাজগুলো করে কতটুকু উপভোগ করেন বলে আপনি মনে করেন?