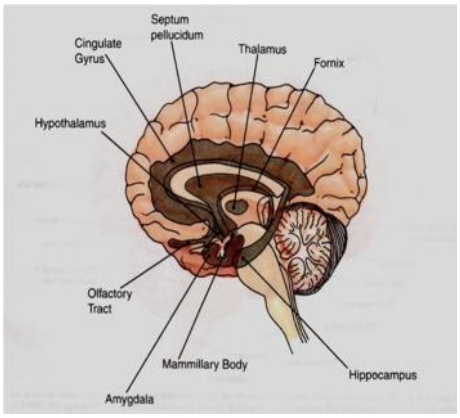
# CHAPTER 2

# TEORITICAL BACKGROUND

## 2.1 Anatomy Concept

### 2.1.1 Neurotransmission




Picture 2.1 Hypothalamus
This picture is taken from Patricia G. O`Brien (2014)

Due to the combination of diffusion and electrical factors, the interior of the resting neurons charged more negatively than the outside. It polarized at about -65mV. The difference in charge between the outside and inside of neuron is called as membrane potential. A large amount of energy (ATP) of cells is required to maintain a potential difference. If the pumps fail and neurons no longer function in case of oxygen deprivation so ATP is produced from oxygen and energy food sources. When the potential action enters the terminal, there will be a depolarization of the potential membrane with the charge movement up.

Depolarization is the trigger to release of neutron smites into the cleft synaptic. After depolarization, the cell rapidly repolizes so it can respond immediately to the arrival of the next potential action.

The neurotrasmiter may be either excitatory (such as glutamate) or inhibitoric (such as GABA). If the neurotrasmiter is excitatory, a positive sodium or calcium will flow into the postsinaptic cell and caused depolarization of the neuron. If the neurotrasmiter is inhibitory, it causes the negative charged chloride to flow into the postsynaptic or positive charged potentially outlet neuron. It causes the cell to be more negatively charged (returning the cell to its resting potential), and not likely to send to the next action potentially. Small currents form and travel along the dendrites to the body cell between the body cell and axon. There is an area called the hilok axon. So it is called by hilok oxon because it likes tools boots on the highway. If the current is enough (depolarization) to travel (changing the charge from -65mV to a threshold range of about -40mV), then the all-or-none action potential is generated and runs down the axon. If depolarization is not enough on the hilok axis, the cell will not release neurotransmitters. The frequency and potential patterns action are similar to those of the morse code of the brain, to send information to the process and in interpretation.(Price & Wilson 2010)

### 2.1.2 Emotion Settings

#### 2.1.2.1 The Limbic System

The limbic system is an area of the brain. It is located above the brain stem. Which consists of the thalamus, hypothalamus, hippocampus, and amygdala (although some sources distinguish the structure contained in this system).

The thalamus regulates activity, sensation, and emotion. The hypothalamus is involved in the regulation of body temperature, appetite control, endocrine function, sex drive, and impulsive behavior associated with feelings of anger, rage and joy. The hippocampus and the amygdala are involved in the rise of emotions and memory. Limbic system disorders lead to various mental disorders, such as memory loss in dementia sufferers or poor emotional control and impulses on manic or psychotic behavior (Videback, 2016).

#### 2.1.2.2 Dopamine

Dopamine, a neurotransmitter especially found in the brain stem. It is known to be involved in complex motion control, motivation, cognition, and emotional response settings. Dopamine is generally excited and synthesized from tyrosine, an amino acid in food. Dopamine involves in causing schizophrenia and other psychosis, as well as movement disorders such as Parkinson's disease. Antipsychotics works by blocking dopamine receptors and decreasing dopamine activity (Videback, 2016).

#### 2.1.2.3 Acethylcholine

Acetylcholine is a neurotransmitter found in the brain, spinal cord, and peripheral nervous system, especially in the skeletal muscle neuromuscular. Acetylcholine may be excitable or inhibitory. Acetylcholine is synthesized from choline. It finds in foods such as red meat and vegetables and has been shown to affect sleep or awake cycles as well as to active muscle signal. Research shows that people with Alzheimer's disease have decreasing in the number of decaying acetylcholine neurons, and patients with myasthenia gravis (an impulse impaired muscle failing through the mioneural link, causing muscle weakness) have decreased amounts of acetylcholine receptor (Videback, 2016).

## 2.2 Concept of Schizophrenia

### 2.2.1 Definition of Schizophrenia

Hawari (2008) states that schizophrenia can be defined as a mental disorder syndrome that the sufferer is unable to judge reality well and poor self-understanding.

According to Keliat (2010) schizophrenia is a mental disorder characterized by a decline or inability to communicate, a disturbance of reality (hallucinations and wisdom), unfair or dull affects, cognitive impairment (incapable of abstract thinking) and experiencing difficulty in daily activities .

Futhermore Stuart and Laraia (2008) explain that schizophrenia is a group of psychotic reactions that affect different areas to the individual, including the function of thinking and communication, accepting and interpreting reality, feeling and showing emotions and behaving that are rationally acceptable.

### 2.2.2 Etiology

Evidence of genetic involvement as a cause of schizophrenia is stronger: up to 50% of identical (homozygotic) twins suffer the same diagnosis, compared with about 15% of non-identical (dizygotic) twins. The strength of genetic factors varies in each family, but about 10% of the client's immediate relatives (parents, siblings, and children) also suffer from schizophrenia, as do 50% of children whose parents suffer from schizophrenia.

Speech abnormality or premorbid behavior may be seen in childhood. The role of obstetric complications and intra uterine viral infection remains unproven. Ventricular enlargement and temporal lobe abnormalities are rare findings on brain CT scans. Thus, the image shows a genetic brain disorder, which is amplified or induced by a vague form of environmental damage (Davies & Craig,2009).

2.2.3 Clinical Manifestation

2.2.3.1 Positive of Sign and Symptoms

These signs and symptoms are essentially normal versions of normal brain function, which are disruptions to the function of thinking, understanding, forming ideas, and feeling confident. A client with a mind disorder may complain of disturbed concentration or his mind is dead-end or empty (thought obstructed). A client who suddenly stops confused while talking so that the interviewer finds it difficult to follow the direction of the conversation is a typical sign (Davies & Craig, 2009).

2.2.3.2 Negative Symptoms

Negative symptoms include loss of personal abilities such as initiative, interest in other things, and feelings of pleasure (anhedonia). Dull or flat emotions, little talk, and much time spend doing nothing is typical behavior ( Davies & Craig, 2009).

2.2.3.3 Forms of Schizophrenia

Paranoid Schizophrenia is a form that often find to dominate by clear positive symptoms, including delusion that it can develop and become theory of complex conspiracy, at first it seems reasonable (Davies & Craig, 2009).

## 2.3 Basic Concepts of Hallucination

2.3.1 Definitions

Varcarolis in Yosep (2013) defines hallucination is as dependent on a person's sensory perception where there is no stimulus (Varcarolis, 2006).

This definition She states that hallucination is one of the symptoms of perceptual sensory disturbance experienced by mental client. The client's senses, the sensation of sound, sight, tasting, touch, or exhortation without any real stimulus (Ariani, 2012)**.**

Trimelia (2011) states that hallucination is a state in which a person undergoes a change in the number and pattern of an approaching stimulus (initiated internally or externally) accompanied by a reduction or overload, disorder or abnormality responding to the stimulus (Townsend, 1998). According to Muhith (2015) hallucination is one of the most common symptoms found in clients with mental disorders. Hallucinations synonymous with schizophrenia. All schizophrenic clients among them experienced hallucination.

Futhermore Maramis (1998) in Muhith (2015) explaines that hallucination is perceptual disorders in which the client perceives something that is not actually there. In this case, the perception of the senses without any external stimulus.

Based on some definitions above the researcher can conclude that the hallucination is the wrong perception of the client to the environment without any real stimulus, gives wrong perception or opinion about something without any real object or stimulus and loss of human ability to distinguish the internal stimulus of the mind and external stimulus.

2.3.2 Etiology

According to Trimelia (2011), there are two classifications of etiology of hallucinations, namely :

2.3.2.1 Predisposition Factor

a. Biological Factors

Nervous system development by abnormalities associated with maladaptive neurobiological responses are only beginning to be understood.

b. Development Factors

If task development shows obstacles and interpersonal relationships are being disturbed so the individual will be stressed and experienced of anxiety.

c. Social Cultural Factors

Individual who feels unacceptable, as the result he will feel discharged, lonely and does not believe to the environment.

d. Biochemical Factors

Due to prolonged stress resulted in activity neurotransmitter brain. For example, the occurrence of acetycholin and dopamine imbalance.

e. Psychological Factors

Family, caregiver and client are great environment to affect the response and psychological condition of the client

f. Genetic factors

The influential gens in schizophrenia are not known yet, but the results of the study show that family factors give a very significant association in this disease.

2.3.3 Precipitation Factor

According to Trimelia (2011), there are two precipitations factor namely :

2.3.3.1 Biologic

Biological the stressors associated with maladaptive neurobiological responses include disorders in the brain feedback loop that govern the information process and the presence of abnormalities in the entrance mechanism in the brain resulting in an inability to selectively respond to stimuli.

2.3.3.2 Triggering Symptoms

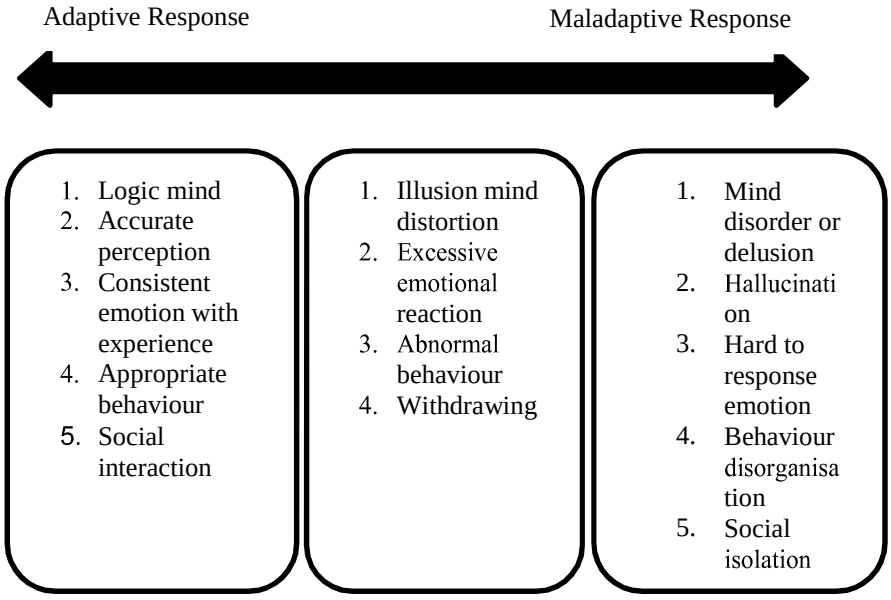
a. Health, such as malnutrition, sleep deprivation, fatigue, infections, central nervous system drugs, information processing disorders, lack of exercise, abnormal and anxious feelings.
b. Environment, such as a critical environment, interpersonal interference, housing problems, stress, poverty, pressure on appearance, changes in life and patterns of daily activities, loneliness (lack of attention) and job pressures.
c. Behaviors, such as low self-concept, despair, loss of motivation, unable to meet spiritual needs, act differently from others, lack of social skills, aggressive behavior and rage.

2.3.4 Range of Hallucination Response

Hallucination is one of maladaftive individual response that exists on neurobiologist response range, as Stuart and Laraia (2005) state in Muhith (2015).

This is very maladaptive response range. If client is healthy so her perception is accurate. The client can identify and interpret stimulation based on information that receives through five senses (auditory, visual, olfactory,gustatory, and tactile). The client with hallucination percepts five senses stimulation eventhough there is no stimulate. For individual response (if perception disorder caused by something) that is wrong to give perception to the stimulus which she get as *illusion*. The client who experienced of illusion if the interpretation by the stimulus of the senses are not accurate to the stimulus received.The response range is shown in the picture below.

**Table 2.1 Range neurobiologist hallucination response**




This table is adopted from Stuart and Laraia (2005) in Trimelia (2011)

### 2.3.5 Kinds of Hallucination

#### 2.3.5.1 Hearing

It is happen when the client hears sounds or noise, even most often people's voices. The voice can be unclear noise until clear noise that has conversation to the client, The audible mind in which the client hears the words that gives instruction to the client to do something and it is possibly dangerous to do. (Nurarif & Kusuma, 2015).

#### 2.3.5.2 Vision

The client usually gets visual stimulus in the form of flashes of light, geometric images, card drawings, or even complicated shadows. And this condition makes the client being afraid. (Nurarif & Kusuma, 2015).

#### 2.3.5.3 Olfactory

This hallucination relates to smell something, for example the smell of blood, urine, and feces. It is generally from unpleasant smells. Olfactory hallucination is often the result of stroke, tumor, seizures, or dementia (Nurarif & Kusuma, 2015).

#### 2.3.5.4 Gustatory

Gustatory hallucination happens when the client feels the taste on her tongue,for example the taste of blood, urine, or feces and then she spits directly and vomit (Nurarif & Kusuma, 2015).

#### 2.3.5.5 Tactile

When the client experiences of pain or discomfort without a clear stimulus, for example electrocuted shock coming from soil, dead matter or others, and feeling insects on the surface of the skin, it shows that she has tactile hallucination (Nurarif & Kusuma, 2015).

2.3.5.6 Kinesthetic

This hallucination appears when the client feels the blood flow along her body, the digestive process, the formation of urine, and even the feeling of his body floating above the earth surface (Trimelia, 2011).

2.3.6 Stages of Hallucination

According to Yosep & Sutini (2007), there are five stages of hallucination. They are namely :

**Table 2.2 Stages of Hallucination**

| | |
|---|---|
| Stage I: Sleep disorder<br><br>It is the beginning phase before hallucination appear | Client feels to have a lot of problems, wants to escape from the environment, fear if others people know that he has a lot of problem. The problems will feel difficult due to various stressors accumulate, such as pregnant lover, involved in drugs, betrayed lover, a problem on campus, drop out, the issue was pressing because it accumulates while system support is less and perception of the problem is very bad. Difficulty in sleeping is continously so she uses her imagination. The client assumes that early daydreams as a problem solve. |
| Stage II: Comforting<br><br>Hallucination generally receives as something that she experiences. | Client experiences of the emotion that continue as the feelings of anxiety, loneliness, fear,sinful and tried to focus in thinking on the onset of anxiety. |
| Stage III: Condemning<br><br>Hallucination comes more often to the client. | Sensory experiences of client becomes frequent and biased. The client begins to feel no longer and able to control it. She starts to keep a distance between herself and the object. The client begins to pull away from the others, with the intensity of a long time. |
| Stage IV: Controlling severe level of anxiety.<br><br>Sensory function becomes irrelevant to reality. | The client tries to fight noises or abnormal sensory coming. The client starts to feel lonely when hallucination ends. This is the beginning phase of psychotic disorders. |
| Stage V: Conquering panic level of anxiety.<br><br>The client experiences an | Sensory experienced is interrupted, the client begins to feel threatened by the voices, especially when the client can not comply with threats or orders that he |

| | |
|---|---|
| interruption in appraise the environment. | hears from his hallucination. Hallucination can stop for minimum of four hours or a day. When the client does not get a therapeutic communication so the severe psychotic disorders occurs. |

2.3.7 Clinical Manifestation

According to Stuart and Sundeen (1998) and Carpenito (1997) in Trimelia (2011), we can get subjective and objective data of the client's hallucination from :

2.3.7.1 Grin or an unacceptable laugh

2.3.7.2 Moving her lips without making a sound

2.3.7.3 Rapid eye movements

2.3.7.4 Slow or silent verbal response

2.3.7.5 Silent and feeling with something exciting

2.3.7.6 Seem talking alone

2.3.7.7 Move her eyeballs quickly

2.3.7.8 Moving like throwing or taking something

2.3.7.9 Sitting stunned, looking at something, suddenly ran into another room

2.3.7.10 Disorientation (time, place, people)

2.3.7.11 Change ability and solve problems

2.3.7.12 Changes in behavior and communication patterns

2.3.7.13 Anxiety, fear

2.3.7.14 Sensitive excitatory

2.3.7.15 Reported hallucinations

2.3.8 Medical Management

2.3.8.1 Chlorpromazine

a. Indication

1) Controlling Mania, shcizofrenia therapy, control of nausea and vomiting, eliminate anxiety and fear before surgery, acute intermittent porforia.

2) Additional therapy in tetanus. Uncontrollable hiccups.
3) The behavior of children 1-12 years explosive and irritable and short-term therapy for hyperactive children.

b. Contra indication

Hypersensitivity to chlorpromazine or other components of the formulation, cross-hypersensitivity reactions between phenothiazine may occur, severe CNS depression and coma (ISO Indonesia, 2010).

c. Side effect

The most important side effects are on the liver and blood, probably due to an allergic reaction. This substance can block the bile ducts after 2-4 weeks and this damage is not always reversible. Blood disorders are often reported. Other common side effects are strong sedative effects and frequent GEP (Tjay & Rahrdja, 2007).

2.3.8.2 Haloperidol

a. Indications

Delusions and hallucinations in acute and chronic schizophrenia, acute confusion, paranoia, chronic and acute psychosis, anxiety, stutter, manic disorders, behavioral and personality disorders in children, psychomotor agitation in behavior disorders (ISO Indonesia, 2010).

b. Contraindications

1) Parkinson's sufferers
2) Endogenous depression without agitation
3) Neurological disorders with pyramidal or extrapyramidal

4) Coma
5) Hypersensitivity
6) Pregnant
7) Hypersensitivity
8) Central nervous system depression (ISO Indonesia, 2010).

c. Side effect
1) Extrapyramidal neurological reactions such as muscle hypertonia
2) Tremor (parkinsonism)
3) Acatisia
4) Muscle spasm
5) Uncoordinated eyeball movement
6) Orthostatic hypotension (ISO Indonesia, 2010).

2.3.8.3 Tryhexiphenidyl

a. Indications :
1) Parkinson.
2) Symptoms of parkinsonoid due to the influence of drugs to the central nervous system (ISO Indonesia, 2010).

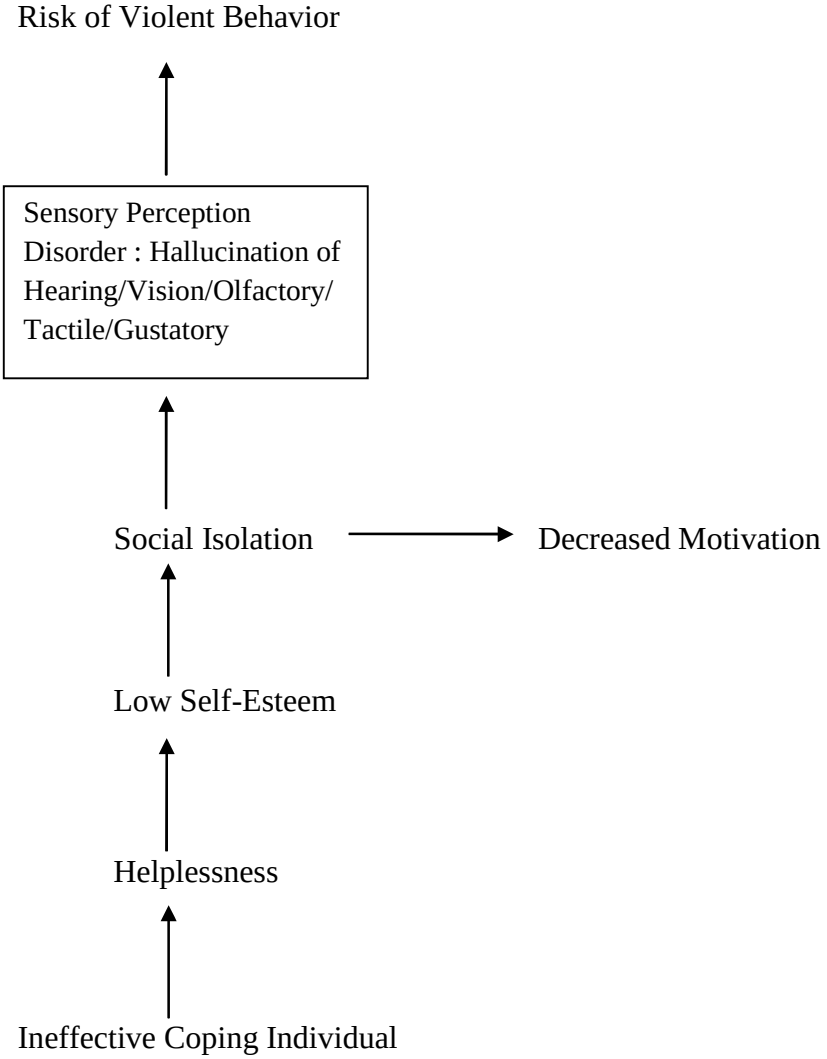
b. Contraindications

Hipersensitifas to triheksifenidil or other components in the preparation, angle-closure glaucoma, duodenal or pyloric obstrusksi, peptic ulcer, urinary tract obstruction, achalasia (ISO Indonesia, 2010).

c. Side effects :
1) Dry mouth blurred vision
2) Anxiety
3) Urinary retention
4) Tachycardia
5) Renal dilatation (ISO Indonesia, 2010).

2.3.9 Pathway

Picture 2.1 The Pathway of Hallucination (Fitria 2012)




## 2.4 Theoritical Review of Nursing

2.4.1 Assessment

Assesment is the beginning and primary based of nursing process and the systematic process of data collection from some sources to evaluate and identify client's health state (Iyer *et al.*, 1996) in (Muhith, 2015).

According to Stuart and Laraia (2005) in Muhith (2015) assesment of client with hallucination is focused on:

2.4.1.1 Predisposition Factor

a. Late Growth Factor
   1) Baby age, meal, drink and safety does not fulfill.
   2) Baby age, autonomy does not fulfill.
   3) School age some incident experience that unresolve.

b. Psychological Factors

   Easy to get dissapointed, easy to hopeless, high anxiety, introvert, high self confidence, low self esteem, unclear self identity, role crisis, negative self image, destructif coping.

c. Socio-culture Factors

   Social isolation on elderly, disability, chronic disease, high environment demands.

d. Biologic Factor

   There are some physical injury, such as: brain atrophy, venrticle dilatation, chage of size and form of cortex cell and limbic.

e. Genetic Factors

   There is hereditary impact for hallucination, such as there is family that also suffers from schizophrenia and monozigot twin.

2.4.1.2 Behavior

Common behavior that appears from client who experiences of hallucination is ham and haw, laugh by himself, nodding head, suddenly afraid of something, suddenly withdraw her self, restless, moves such as take or throws something, suddenly be mad and attacks, looks at one direction, withdraw.

2.4.1.3 Physical

a. Daily Life Activity

Physical hallucination can occur in the client's daily life activity, for example : Inadequate nutrition appears when her hallucination asks the client not to eat, the client's sleeping habit will disturb because the client feels fear, deficit self care or client doesn't take a bath, client can't participate with excessive physical activity, agitation, and abnormal activity, etc.

b. Habit

The client's hallucination can stop when she stop to do her habit, for example she stop to drink alcohol, stop to use the drugs, hallucinogen, self destructive behavior.

c. Health history

Schizophrenia, delirium related to fever history and use of drug.

2.4.1.4 Body System Function

a. Body weight changes, hypertermia (fever).
b. Neurological mood changes, disorientation.
c. Inefective endocrine by increasing thetemperature.

2.4.1.5 Emotion State

Affect is not accordance, feeling guilty or embarrassed, negative attitude and hostile, severe anxiety or panic, fight.

2.4.1.6 Intelectual State

Altered perception, vision, auditory, olfactory, gustatory, mind concept not realistic, unlogic and hard to followed, less motivation, regretion coping and denial with less communication.

2.4.1.7 Social State

Hopeless, decrease of life quality, inability to solve stress and anxiety.

2.4.2 Nursing Diagnose

According to Trimelia (2011), there are some of nursing diagnoses, namely:

2.4.2.1 Altered Sensory Perception : Hallucination

2.4.2.2 Social Isolation

2.4.2.3 Self-Esteem

2.4.2.4 Helplessness

2.4.2.5 Ineffective Coping Individual

2.4.2.6 Self-care Deficit

2.4.3 Nursing Planning

Furthermore Trimeilia (2011) states that nursing action planning consists into three aspects. They are purpose, objectives and nursing interventions. Nursing action plannings for the client with major problem of hallucination are as follows:

2.4.3.1 General purpose

Client can control hallucination

2.4.3.2 Spesific purpose

a. Client can show the trust relationship.

Out comes criteria:

1) Client can show friendly face expressions.
2) Showing affection.
3) There is eye contact.
4) Want to shake hands.
5) Answer greeting, mention his or her name.
6) Want to talk with nurse.
7) Want to express his or her problems.

Intervention:

a) Develop a trusting relationship with the terapheutic principles.

Rational:

The establishment of a trusting relationship between client and the nurse is important, the client will not be introvert. The nurse can assess the client's data for intervention and motivation easily.

b) Do friendly greeting with client.

Rational:

A friendly attitude will bring the client feels confidence.

c) Ask client's full name and nickname.

Rational:

By knowing the name of client, it can make client and the nurse to be closed.

d) Explain the purpose of meeting

Rational:

Avoid client's anxiety to the nurse.

e) Show empathy and acceptance response toward the client.

Rational:

Triggering client to be more extropertto the nurse what is in his feeling right now.

f) Pay attention to the client and fulfill client's needs.

Rational:

By providing client's needs, it can increase a sense of comfort to nurses.

b. Client can recognize hallucination

Out comes criteria:

1) Client can specify the time, content and frequency of hallucination.
2) Client can express feelings towards his hallucination.

Intervention:

a) Assess client's knowledge about the behavior of isolation and sign symptom.
   Rational:
   It is easy for the nurse to know how good client's knowledge about his disease.
b) Hold a brief contact and often gradually
   Rational:
   Make client feels closer to nurse
c) Observation of verbal and nonverbal behavior associated with hallucination.
   Rational:
   Knowing about client disease progress.
d) Accept hallucination as a real for client and unreal for nurses.
   Rational:
   Showing a sense of concern for client.
e) Identification with client about the timing of the hallucination, the content and frequency of hallucination.
   Rational:
   Helps client to recognize the type of hallucination that he suffers.
f) Encourage client to express her feelings when hallucination appears.
   Rational:
   Helps to choose how to control hallucination.
g) Discuss with client to know whether client know about her feeling when hallucination comes.
   Rational:
   Teaching client to be able socialized.

h) Provide positive reinforcement or praise to client's ability to express her feelings.
   Rational:
   Improving client self confidence.

c. Client can control her hallucination

Outcomes criteria:

1) Client can specify the action that is usually done to control her hallucination.
2) Client may mention a new way to control her hallucination.

Intervention:

a) Identification to client's action is normally done if hallucination appears.
   Rational:
   Introduce to the client about how to control hallucination.
b) Give praise and reinforcement of positive action.
   Rational:
   Improving client self confidence.
c) Together with client to develop activity planning to prevent the occurrence of hallucination.
   Rational:
   Helping client to choose his activities.
d) Discuss how to prevent the onset of hallucination and control hallucination.
   Rational:
   Helping client independently control hallucination.
e) Encourage client to choose the method used in dealing with hallucination.

Rational:

Helping client to choose the right way to control hallucination.

f) Give praise and reinforcement against the right choice.

Rational:

Improving client's self confidence.

g) Discuss with the clientthe result of the efforts which he has made.

Rational:

Evaluating the ability of the client.

d. Client can support the family or take advantage of the support system to control his hallucination.

Outcomes criteria:

1) Family can trust with the nurse.
2) Family can explain the feelings.
3) Family can explain how to care for client's hallucination.
4) Family is able to demonstrate how home care for client who has got hallucination.
5) Family can participate in client's hallucination care

Intervention:

a) Develop of trust relationship with family example: say hi, introduce yourself, tell the goal, create contracts and exploration the feeling to family.

Rational:

Family is as a primary role to support recovery of client.

b) Discuss with family members about the behavior of hallucination, the consequences that would happen if the behavior is not addressed hallucination, how the family face and how care for hallucination client.

Rational:

So that family can detect early hallucination problems, beside that the family can determine a solution or at least ask for help on health workers.

c) Encourage family member visit client regularly and alternately least once a week.

Rational:

Attention from family influence on the healing client.

d) Give positive reinforcement or praise for the things that have been accomplished by family.

Rational:

Give confidence to the family.

e. The client can take advantages in consuming the drug well

Out comes criteria:

1) Client can mention the benefits, dosage and side effects of drugs.
2) Client is able to demonstrate the use of medications correctly.
3) Client received information about the drug side effects and due to stop taking the drug.
4) Client can mention five principles of the right use of medicines.

Intervention:

a) Discuss with client about the dosage, frequency and benefits of taking medication.

Rational:

Preventing errors in drug administration during home care.

b) Encourage client to ask themselves about the drug to the nurse and get the benefits.

Rational:

Introduce to client types and benefits of drugs taken.

c) Encourage client to talk to the doctor about the benefits and side effects of drugs.

Rational:

Accurate knowledge can prevent drug abuse.

d) Discuss due to stop taking the medication without consulting a doctor.

Rational:

Sometimes a danger or threat can be a very good motivation.

e) Help client to use the drug with five major principles

Rational:

Convincing use of the drugs.

f) Provide positive reinforcement.

Rational:

Increase confidence of client.

2.4.4 Implementation

2.4.4.1 Implementation Strategy 1 for the client:

a. Identify the client's hallucination type.
b. Identify the client's hallucination contents.
c. Identify the client's hallucination time.
d. Identify the clientt's hallucination frequency.
e. Identify the client's situation that trigger hallucination.
f. Identify the client's response toward hallucination.
g. Teach the client to do hallucination rebuke.
h. Put hallucination rebuke into the client daily activity schedule.

2.4.4.2 Implementation strategy 2 for client:

a. Evaluate the client's daily activity schedule.
b. Suggest the client to take medicine regularly.

c. Put taking medicine into her daily activity schedule.

2.4.4.3 Implementation strategy 3 for client:

a. Evaluate the client's daily activity schedule.
b. Teach the client to control her hallucination by talking to other people.
c. Put talking to other people into her daily activity schedule.

2.4.4.4 Implementation strategy 4 for the client:

a. Evaluate the client's daily activity schedule.
b. Teach the client to control her hallucination by doing her activity as the client usually does at home.
c. Put the activity that the client does in hospital into her daily activity schedule.

2.4.4.5 Implementation strategy 5 for the client:

a. Evaluate the client's rebuke, take medicine, talk with other, and do activity training in the client's schedule .
b. Training the client to do his or her daily activity.
c. Evaluate independent activity that has done by the client.
d. Value if the hallucination being controlled.

2.4.4.6 Implementation strategy 1 for family:

a. Discuss the problem that is felt by family when having treatment for the client.
b. Explain the definition, sign and symptom and etiology of hallucination (using booklet).
c. Explain how to treat the client with hallucination.
d. Teach how to treat hallucination: rebuke.
e. Suggest a help to the client according to daily activity schedule and give praise for client.

2.4.4.7 Implementation strategy 2 for family:

a. Evaluate the family's activity such as treat and train the family's activity to rebuke and to give praise.
b. Explain the 6 right drugs.

c. Train how to give or guide in taking medicine.
d. Suggest the family to help the client according to the client's daily activity schedule and to give praise.

2.4.4.8 Implementation strategy 3 for family:

a. Evaluate the family's activity to treat or train the client on rebuke and take medicine.
b. Explain the way to talk with other people and do activity to control hallucination.
c. Train and give time to talk with the client especially when hallucination comes.
d. Suggest the family to help the client according to daily activity schedule and give praise.

2.4.4.9 Implementation strategy 4 for family :

a. Evaluate the family's activity in treat or train the client for rebuking, taking medicine and talk with other.
b. Explain the follow up to the pshyciatric hospital or public health center, episode sign, and reconciliation.
c. Suggest the family to help the client according to the client's daily activity schedule and give praise.

2.4.4.10 Implementation strategy 5 for family:

a. Evaluate the family's activity in treat or train the client on rebuking, taking medicine and talk with other, doing daily activity schedule and then follow up and give praise.
b. Evaluate the family's ability to treat the client.
c. Evaluate the family's ability to controll pshyciatric hospital or public health center.

2.4.5 Evaluation

According to Trimeilia (2011) , the evaluation is done by focusing on the client's behavior change after giving nursing

action. Evaluation is also given to the family. It is because the family is as important supporting system.

a. Can the client recognize hallucination, include content, situations, time and frequensi hallucination appear.
b. Can the client express his or her feeling when hallucination appears.
c. Can the client control his or her hallucination with new four ways, include hallucination rebuke, take the medicine regularly, talk to other people, and do daily activity.
d. Can the client express his or her feeling practice in four ways to control hallucinations.
e. Can the client empower his or her supporting system or family control hallucination.
f. Can the client take medicine regularly.