IJNRD.ORG   ISSN : 2456-4184

INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG

An International Open Access, Peer-reviewed, Refereed Journal

EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE REGARDING MANAGEMENT OF PSYCHIATRIC EMERGENCIES ON KNOWLEDGE AMONG STAFF NURSES AT SELECTED HOSPITAL, CUDDALORE DIST, TAMIL NADU

BY

MRS. IMMACULATE CINDERELLA.I

ASSOCIATE PROFESSOR

TRIPURA COLLEGE OF NURSING

ABSTRACT

A Quasi Experimental study to evaluate the effectiveness of SIM on management of Psychiatric Emergencies on knowledge among staff nurses at selected hospitals, Cuddalore district of Tamilnadu. Quantitative Research approach with quasi experimental design study without control group was adopted by applying purposive sampling technique among 45 nurses working in a psychiatric ward; objective was to assess knowledge, to test the effectiveness of SIM, to compare and to associate their knowledge with their demographic data. Data was collected through socio demographic proforma and structured knowledge questionnaire was used; modified open system theory by S W Kenney was applied. Demographic characteristics reveals majority 51%were in age group of 21-30, 80% were females 44% Hindus, 62% were GNM and had1 to 10 years of experience, 73% did not attend any in service program on psychiatric emergencies management.

Self-administered questionnaires was used, at the end of pretest SIM was administered, Over all pretest mean score was 28 ± 4.1(SD) and post test 50.7 +3.41 mean difference was 22.7 Area wise comparison between pretest and post test was done ,found increase in knowledge, whereas the paired t' test shows that calculated value (11.91) was greater than table value (2.0001) p-value <0.01 was significant at level of 0.05 , indicates SIM was effective and there was no significant association(chi square)revealed with their selected demographic data. Overall the study was found effective in increase in knowledge on psychiatric emergencies.

INTRODUCTION

Background of the study

Psychiatry emergency is a stress induced pathogenic response that physically endangers the affected individual (or) others that significantly disrupts the functional equilibrium of the individual or his/her environment and it requires immediate intervention whereas medical emergency is one which endangers the life of individual patient (Bhatia Ms, 2004).

An emergency is an unforeseen combination of circumstances which calls for immediate action. A medical emergency is defined as a condition which endangerous life and/or causes great suffering to the individual patient. A psychiatric emergency is a disturbance in thought, mood/or action which causes sudden distress to the individual or others and/or sudden disability thus requiring immediate management (Ahuja N., 2004).

Majority of studies noted that around 90% of those who die by suicide have a mental disorder, 25% of completed suicides were found to have mood disorders and alcohol dependence and abuse were 35%. However, the suicides rates are increasing in numbers with adjustment disorder (Vijakumar, 2007).

A central idea in managing psychiatric emergencies is that safety is continuously assessed. This includes not only the immediate safety of the patient, but yours and any involved (or even proximate) third parties. Due to the vital importance of safety, be familiar with the best means to access emergency psychiatric and/or medical assessment and stabilization (Kufur.J. David et al., 2008).

Training staff to identify high risk patients can be done by emphasizing performing a complete evaluation that involves a detailed past psychiatric history, careful physical examination and laboratory studies can be used to rule out organic causes of agitation. Staff should be trained to recognise warning signs of violence, including anger, catatonia, bizarre behaviour, psychomotor agitation, restlessness, confusion, demanding immediate attention, excitement, hyperactivity (Kavaler Florence 2001).

NEED FOR STUDY

The major psychiatry emergencies can be one or more such as new psychiatric disorder with acute onset, a chronic psychiatric disorder with relapse, suicide, violence, aggression, self harming. Iatrogenic emergencies, extrapyramidal symptoms (EPS), dystonia, akathesia, lithium toxicity and alcohol or drug dependence. Therefore it is an emergency situation (or) unforeseen circumstances which needs immediate intervention (Ahuja N. 2006).

Suicide is among the top 10 causes of death in India and most other countries. According to the National Crime Research Bureau (NCRB) there were 108,597, suicides in India in the year of 2000, means 300 suicides per day, one suicide every 5 mts (Ahuja N., 2006).

In India the average annual suicide rate for the general population was about 95 per 10,000, 148/100,000 and 58/100,000 for young women and men, respectively and 189/100,000 in the elderly. The majority of suicides (37.8%) are by those below the age of 44 years. The high rates of suicides tend to confirm the impression of many researchers. The suicide rate is much higher than that reported by national suicide statistics (Manoharan, 2007).

The Southern states of Kerala, Karnataka, Andhra, Pradesh and Tamil Nadu has a suicide rate of below 15 per 100,000 while in the Northern states of Punjab, Uttar Pradesh, Bihar and Jammu and Kashmir the suicide rate is below 3 per 100,000 (Vijayakumar, 2007).

In Tamil Nadu, Christian Medical Collage and Hospital, Vellore stated that in their institution OP poisoning accounted for 29% of poisonings in the year 1994-95 whereas, it is 70% accounted in the year 2005 (Cherian A.M., 2005).

International Association for health care security and safety (IAHSS) 10 year crime survey with included about 250 hospitals from United States & Canada. This survey (1991-2000) is considered to be the best indicator of health care crime available murder 0.02%, suicide 0.12%,

rape 0.02%, other sexual assaults 0.18%, robbery 0.65%, aggravated assault 0.84%, simple assault 5.40% and vandalism 10.63% (Kavaler Florence, 2001).

Aggression is the major psychiatric emergency and study report shows that 24.6% of verbal aggression, 75.0% physical aggression 66.4% towards staff member and 4.3% victims needed medical treatment (Kelesen et al., 2007).

Violence directed towards staff and other patients is a continuous problem needing Institutional attention; over whelming the facilities where risk of assault was highest were in psychiatric hospitals. Nurses expressed variety of feelings of anger shock, disbelief helplessness the nurses felt that they should have done something to prevent attack and also nurses were seems to blame themselves for not being able to do anything to prevent the attack (Kavaler Florence, 2001).

Each year there are 1 1/2 million hospitalizations caused by adverse drug reaction in the United States. As many as 5% of all hospital admissions are directly or indirectly caused by these problems which are responsible for almost 15% of all hospital days. Adverse drug reactions are often misdiagnosed early in their course. It is estimated that three billion dollars a year are spent treating adverse drug reactions and that between 18 and 30% of patients who are hospitalized for other reasons will experience a significant adverse drug reaction during their hospital stay. It is likely that his hospital days will be doubled. Adverse drug reactions have been implicated in up to 5% of hospital deaths (Richard C., 2001).

A study was conducted to determine the level of agitation that psychiatric patients exhibit upon arrival to the emergency department. The secondary purpose was to determine whether the level of agitation changed over time depending upon whether the patient was restrained or unrestrained. This study demonstrated that patients who were restrained were more agitated than those who were not, and that agitation levels in both groups decreased over time (Zun S. Lesile, 2007).

Adverse reactions to psychotropic drugs are neuroleptic malignant syndrome, serotonergic syndrome, anticholinergic crisis, water intoxication. Tricyclic antidpressents are the most common cause of drugs related emergency in psychiatric which cause death due to over

dose. Between 25% to 50% patients are admitted to psychiatric intensive care unit (Boynd and Nihart, 2005).

In India use of alcohol is 45% and men were 9.7% regularly using alcohol and in Tamil Nadu the prevalence of current alcohol use among men were 20-38% and in women were 3.7% (National Sample Survey Indian Alcohol Policy Alliance, 2005).

Most people who suffer from alcohol dependence or alcohol abuse are reluctant to take any treatment in fact most of them deny the problem. Since alcohol has serious health and social consequences, there is a definite need for them to be pressured to give up drinking. Some habitual drinkers seek treatment when they run in to health or legal problems (Jonn, 2007).

In the psychiatric clinical set up medications should be securely stored and dispensed by appropriate staff. Qualified staff must administer medication. Emergency psychiatric medications are immediately available provision is made for ensuring safety and security to the extent possible, there are no dangerous materials accessible to patients who may be dangerous to themselves or others, including sharp objects weapon, materials that can be used for hanging, patient medications etc. The space is continuously supervised and monitored by staff (Allen H. Michael et al., 2002).

Study highlighted that nurses need more knowledge regarding self harm behaviour of patient because mostly nurses become emotional, instead of giving immediate care to patient. Nurses also recognised their lack of knowledge and understanding about self harming behaviour of the patient (Wilstraud et al., 2007).

McKinley et al., (2001) done study about nurses behavioural intentions towards self poisoning patient. He reported that knowledge of nurse towards self poisoning patient is important to those involved in the planning and delivery of care towards this client groups. The study shows that nurses with more positive orientation towards self poisoning patient differ in behavioural and normative beliefs from nurses who have a less positive orientation.

McCann et al. (2006) conducted a explorative study on emergency department nurse's attitude on deliberate self harm result shows that most nurses had received no educational preparation to care for patients with self-harm; over 20% claimed that the department either had no practice guidelines for deliberate self-harm or they did not know of their existence and one-third

who knew of them had not read them. Recommendations are made for improving the educational preparation of emergency department nurses, for improving awareness and implementation of practice guidelines, and for improving attitudes towards patients. Further research is needed to confirm these results.

Medical emergency departments often view the mentally ill as a nuisance. Staff who are appropriately trained learn to handle behavioural emergencies as a team with less confrontational method   the psychiatrist participation helps achieve more rapid diagnosis and initiation of psychiatric treatment and also requires a staff to patient ration of 1.4 with capacity for 1:1 observation staff must be awake 24 hrs additional staff must available on call. A psychiatrist must be available by phone 24 hrs and must perform an examination with in 24 hrs (Allen H. Michael et al., 2002).

To prevent assault among heath workers the casualty centre should have adequate security staff. All the rooms should have at least two exits with a call button, so that all available staff can rush to the aid of the medical person being assaulted. Medical personnel should also be careful not to provoke an assault by being always polite and respectful, calm, avoiding prolonged eye contact with potentially violent patients, giving clear instructions, remaining at a safe distance unless unavoidable, keeping clear exits, removing all articles in their rooms which could be used for assault. All cases of assault must be investigated and discussed among the staff and the administration and lessons drawn for future (Sudarsannan S., 2004).

Ngowi A.V. et al., (2001) done a survey on Tanzanian health care providers to assess their knowledge of toxic effect of pesticide poisoning .The survey indicated that training of hospital staff in toxicity of pesticide exposure exam is an important task and a prerequisite for efficient recognition, diagnosis and treatment of pesticide poisoning cases.

Self instructional module is defined as a self contained informational activity that allows learners to progress by themselves at their own place (Abruzzese, 1996).

Mostly psychiatric patients are not aware of time, place and person. Since they lack insight they are unaware of their behaviour and its consequences. It is must during psychiatric emergency staff nurse has to be skill full in handling and prudent in taking appropriate action.

Hence being a psychiatric nurse the investigator felt the need of SIM to assess the knowledge regarding management of psychiatric emergency.

Implementation of SIM (Self Instrumental Module).

☐ Effectiveness of Self Instructional Module regarding management of psychiatric Emergency **Statement of Problem:-**

A Study to assess the "Effectiveness of self instructional module regarding management of Psychiatric Emergency on knowledge among Staff Nurse in selected psychiatry hospitals, Tamil Nadu".

Objectives:-

1. To assess the Knowledge of Staff nurses regarding management of psychiatric emergency before.

2.To assess the effectiveness of Self Instructional Module

3.To compare the post -test knowledge score of staff nurses with their selected demographic variables.

2. To find out the association between post-test knowledge score with their selected demographic variables of staff nurses.

Operational definitions:-

Assess: - It is a statistical measurement of the knowledge score of staff nurses regarding management of Psychiatric Emergencies as observed from closed ended questionnaire.

Effectiveness: - It is refers to the significant gain in the knowledge score of the staff nurses regarding management of psychiatric Emergency through Self Instructional Module.

Self Instructional

Module (SIM):- It refers to the systematically organised instructional booklet that allows the staff nurses to learn by themselves regarding management of psychiatric emergencies.

Knowledge: - It refers to the correct written response of the staff nurses to the knowledge items in the closed ended questionnaire regarding management of psychiatric emergencies.

Psychiatric

Emergencies: - Is a disturbance in thoughts, perception, emotion & speech cause the sudden distress to the individual which make individual to behave odd violent aggressive may distract of self (or) others.

Suicide: - Is a deliberate act of self harm with the intention of self inflicted death.

Aggression: - It is unprovoked attack, destructive (or) hostile behaviour to others.

Iatrogenic

Emergencies: - The adverse reaction occurs due to the side effect or over dose of psychiatric medication those are life threatening. Akathesia, tradivedyskinesia, dystonia, Neuroleptic maliganant syndrome.

Substance withdrawal

syndrome:- Symptom occurs immediately withdrawal of heavy intake of alcohol or any other substance. Where the client develops Seizures, in the other word Ram fits.

Staff Nurse: - A person who has successfully completed anyone of the basic nursing programme and working as a staff nurse in the psychiatry ward.

Management: - Care which is provided by the nurse to the patient who have life threatening problem such as suicidal attempt, violence, aggression, adverse drug reaction, substance withdrawal symptoms. It is provided in time skilfully in order to prevent further complication.

Hypothesis:-

H0₁: There will be no significant difference between pre-test knowledge scores of staff nurses regarding management of psychiatric Emergencies.

H0₂: There will be no significant association between post test knowledge score of staff nurse regarding management of psychiatric emergency with their demographic variable of the staff nurses.

Delimitation: - The study was limited to the staff nurses who are

- available during data collection period,

- willing to participate in the study,

- successfully completed any one of the basic nursing programme

Theoretical framework

Theoretical framework is the overall conceptual understanding of the study. Every study has a framework. In a study based on a theory the frame work is referred to as theoretical frame work (Beck C.T., 2003).

The study based upon J.W. Kenny`s open system model. The systems theory concerned with changes due to interaction between various factors in a situation. All living systems are open in which there is a continuous exchange of matter, energy and information open systems have varying degrees interactions with the environment from which the system receives input and gives back output in the form of matter, energy and information. The concepts of J.W. Kennys open system model are input throughout output and feedback.

Input:-

According to him input refers to matter and information. All system must receive varying type and amount of information the environment. The system uses the input to maintain its haemostatics. In the present study input is considered to be the pre-test which included.

- Demographic data,

- Structured interview schedule with close ended multiple choice questionnaires regarding knowledge on psychiatric emergency.

- Self Instructional Module.

Through put:

According to this theory the through put refers to a process by which the system processes input and release an output of functions and information. In the present study the throughput refers to a process by which the knowledge regarding psychiatric emergency was tested and presentation of SIM will be done. In this study the throughput refers to
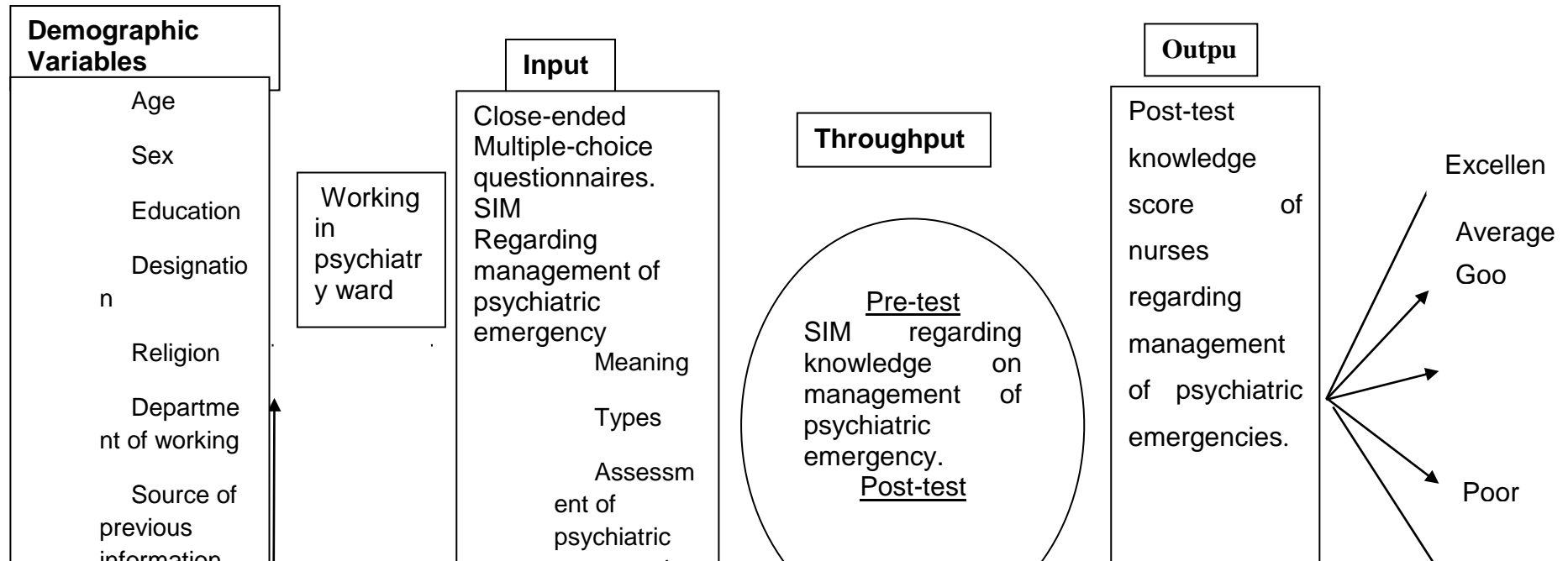
- Pre-test to assess the level of knowledge by structured interview schedule with close ended multiple choice questionnaires regarding knowledge on psychiatric emergency.

- Distribution of SIM

- Post-test to assess the level of knowledge by structured interview schedule with close ended multiple choice questionnaires regarding knowledge on psychiatric emergency.
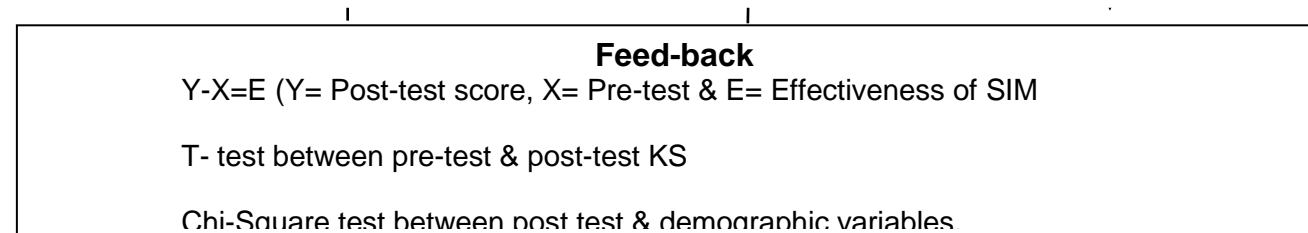
Output:

According to the theory the output refers to matters, energy & information that leave a system. The expected outcomes of the study are based on checking the knowledge regarding coping strategies by structured Interview schedule with help of close ended multiple choice questionnaire.

Feed back:

Feed back as per theory refers to the output that is returned to the system which allows it to monitor itself over time in attempt to move closer to a steady state known as equilibrium. It may be positive, negative (or) neutral. In the present study, the feedback is a process of maintaining the effectiveness of SIM. The formula $Y-X=E$ will be used (Y= post test score, X= pre-test score and E= effectiveness of SIM) to assess the effectiveness of SIM and knowledge regarding psychiatric emergency among staff nurses who are working in Institute of Mental Health. It was assessed by checking the pre-test and post test score. The efficiency of the SIM will be also tested by Chi square test between obtained post-test score with demographic variables.

Demographic Variables

Age

Sex

Education

Designatio n

Religion

Departme nt of working

Source of previous information

Working in psychiatry ward

Input

Close-ended Multiple-choice questionnaires. SIM Regarding management of psychiatric emergency

Meaning

Types

Assessm ent of psychiatric

Throughput

Pre-test
SIM regarding knowledge on management of psychiatric emergency.
Post-test

Output

Post-test knowledge score of nurses regarding management of psychiatric emergencies.

Excellen

Average

Goo

Poor

Fig.No-1.1. Theoretical frame work for effectiveness of planned SIM regarding knowledge on psychiatric emergencies management based on modified open system theory by J.W. Kenney (1999). Source; Julia B.G. (1990) Nursing Theories Page No. 231 -240.

Feed-back

Y-X=E (Y= Post-test score, X= Pre-test & E= Effectiveness of SIM

T- test between pre-test & post-test KS

Chi-Square test between post test & demographic variables

Summary:-

This chapter includes back ground of the study, need for the study and statement of the problem, objectives, operational definitions, delimitations, hypothesis and theoretical frame work.

Review of Literature

Introduction:

Review of related literature is an integral component of any study or research project .the review can be useful in acquainting the research with relevant theory and pointing out the research strategies, specific procedure and instrument that might be productive in pursing the problem. The related review of literature can help in clarification (Polite and Hunglar, 2004).

 The literature of the present study is reviewed under the following sub headings.

> ➢ Meaning and definition of psychiatric emergencies.

> ➢ Incidence of psychiatric emergencies.

> ➢ Types of psychiatric emergencies.

> ➢ Assessment of Psychiatric emergencies

> ➢ Role of nurses in Management Psychiatric emergencies.

> ➢ Knowledge of nurses regarding Management Psychiatric emergencies.

Meaning and Definition of Psychiatric emergencies:

It is an acute disturbance of thought, mood, behaviour (or) social relationship that requires an immediate intervention as a defined by the patient, family (or) the community. A psychiatric emergency might also be defined as a set of circumstances in which the behaviour (or) condition of an individual is abnormal (Allen, 2001).

Emergency psychiatry service is the clinical application of psychiatry in emergency settings. Conditions requiring psychiatric interventions may include attempted suicide, substance abuse, depression, psychosis, violence or other rapid changes in behaviour. Psychiatric emergency services are rendered by professionals in the fields of medicine, nursing, psychology and social work. The demand for emergency psychiatric services has rapidly increased throughout the world and caring for patients in emergency is complex. Professionals working in psychiatric emergency service settings are usually under a high risk of violence due to the mental state of their patients (Hillard, 2004).

Douglas, (2006) defines the following Suicide—self-inflicted death with evidence (either explicit or implicit) that the person intended to die.

• Suicide attempt—self-injurious behaviour with a nonfatal outcome accompanied by evidence (either explicit or implicit) that the person intended to die.

• Suicidal ideation—thoughts of serving as the agent of one's own death. Suicidal ideation may vary in seriousness depending on the specificity of suicide plans and the degree of suicidal intent.

WHO (2009) stated that violence is "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation."

Kristalyn Salters et al., (2009) stated that Aggression refers to any behaviour that is hostile, destructive. Generally, aggressive behaviour has the potential to inflict injury or damage to the target person or object. Aggressive behaviour includes physical assault, throwing objects, property destruction, self-harming behaviours, and verbal threats. Aggression can have mental aspects, as well a number of psychiatric disorders are associated with an elevated risk of aggressive behaviour, including posttraumatic stress disorder, conduct disorder, antisocial personality disorder, borderline personality disorder, and attention deficit/hyperactivity disorder.

Especially antipsychotics are considered to be causing one of the serious drug induced psychiatric emergencies. Neuroleptic malignant syndrome is a potentially lethal complication of first or second generation antipsychotics. Severe symptoms of serotonin syndrome include hyperthermia, delirium, and tachycardia that may lead to shock. Often patients with severe general medical symptoms, such as unstable vital signs, will be transferred to a general medical emergency room or medicine service for increased monitoring (Hedges, D. & Burchfield C., 2006).

Michael Burns, (2008) stated that withdrawal can refer to any sort of separation, but is most commonly occurs upon the abrupt discontinuation/separation or a decrease in dosage of the intake of medications, recreational drugs, or alcohol. In order to experience the symptoms of withdrawal, one must have first developed a chemical dependence. This happens after consuming one or more of these substances for a certain period of time. However, withdrawal from certain drugs (benzodiazapines, alcohol) can be fatal and therefore the abrupt discontinuation of any type of drug is not recommended.

Incidence of Psychiatric emergencies:

Suicide is a serious, growing and complex public health problem and its rate continues to rise and each year 30,000 Americans take their lives. Suicide is by far the most common cause of premature death among patients with major mood and psychotic disorders. A major affective or psychotic disorder increases the risk of suicide from 8 to 22 fold. Attempted suicide is approximately 10 to 20 times more common than completed suicide in the general population (Mohamed I. Ramadan, 2006).

In India in the year 2000, an estimated 8,77,000 people died by committing suicide. This represents one death every 40 seconds and the commonest mode of

committing suicide is by ingesting poison 35% followed by hanging 25%, drowning 9% jumping in front a train 4% and burning 12% (Chandra Sharma Mukesh, 2008).

National Crime Records Bureau (NCRB) reported that over 100,000 people die by suicide in India every year. India alone contributes to more than 10% of suicides in the world. The suicide rate in India has been increasing steadily and has reached 10.5 per 100,000 of population in 2006. Registering a 67% increase over the value of 1980. Majority of suicides occur among men and in younger age groups. Despite the gravity of the problem, information about the causes and risk factors is insufficient.

A study conducted by Arulmani, (2006) on adverse drug reaction monitoring in a secondary care hospital in South India the result shows that out of the total of 187 adverse drug events (ADEs) reported, 164 reports from 121 patients were confirmed as ADRs, giving an overall incidence of 9.8%. This included 58 (3.4%) ADR related admissions and 63 (3.7%) ADRs occurring during the hospital stay. About two thirds of the reactions (102, 62.2%) were classified as probable. The majority of the reactions (53.7%) were mild. Most patients (72.6%) recovered from the incidence. The majority of the reactions were not predictable and not potentially preventable. An average cost of 481 rupees (pound 6) was spent on each patient to manage ADRs.

Kuruvilla A. et al., (2005) conducted study on Incidence of adverse reactions to psychopharmacological agents at CMC Vellore. Five hundred and ninety two patients attending a psychiatric department were included in this study. All patients were followed up for a period of 3 to 4 weeks. The incidence of reactions to haloperidol was higher than the reactions to other drugs. Two or more drugs prescribed together was associated with a higher incidence of reactions. Nearly 65 patients had extrapyramidal symptoms. The frequencies of these reactions were highest with haloperidol, chlorpromazine, trifluoperazine and thioridazine. Dystonic reactions were reported within one to two days after the initiation of therapy in a large group of patients.

Aschen Brenner S. Diane, (2008), who reported that between 0.5% and 3% of all patients treated with traditional neuroleptics develops NMS and also 11%-30% death was reported in earlier days but this figure has decreased progressively with early detection and management.

Fineberg et al, (2004) observed that. 32.7% had experienced physical violence sometimes and 5.1% had often experienced physical violence and 43.1% often experienced verbal violence. Of these, only 6.9% required treatments.

Needham et al., (2005) conducted a systemic review of literature by electronic search with 6616 articles from 8 countries on patient aggression on nurses revealed that 9.8% suffered physically and emotionally 68.6%, patient's assault on nurses made the nurse to feel decreased energy impaired concentration increased cautiousness; socially impaired.

Lavioe et al., (2003) noted that in the emergency department of major teaching hospitals, 46% of staffs noted at least one weapon per month, 43% described at least one physical attack on medical staffs per month, 7% reported act of violence resulted in death.

About 190 million people all over the world consume one psychoactive substance or another. The economic cost of abuse is estimated at more than $414 billion a year. In India, though large scale surveys are unavailable, the growing consumption of alcohol and drugs among youth is a matter of great concern. In India, prevalence of people reporting current use of alcohol is 21.4% (NHS 2004).

A study conducted in Sikkim, among 4648 substance abusers the result reveals that withdrawal was the commonest cause (57.4%) of reporting to the emergency. Cannabis use was the commonest substance associated with psychosis. Alcohol was also the only drug associated with overdose and adverse reaction (disulfiram-like reaction). On the other hand, IDU was associated with infection related visits in the form of abscesses or cellulitis at injection sites.

Similarly, patients coming with medical complications, e.g. hypoglycaemia or ketoacidosis were diagnosed with alcohol use disorders (Akhil Bhalla et al., 2006).

Life-time prevalence of epileptic seizures was assessed in 626 consecutive patients treated for substance abuse (9.2% in alcohol abusers, 12.5% in opioid abusers). A total of 64.8% of the seizures were associated with substance use. seizures occurres during withdrawal of alcohol and during intoxication with dextropropoxyphene and withdrawal from heroin or poppy husk in the opioid cohort. Result indicates that seizures may be more common in older patients with longer duration of dependence among those abusing alcohol (Mattoo, Surendra K. 2009).

Assessment of psychiatric emergencies:

Néeraja K.P., (2005) stated that there are certain clues must be assessed to each client with suicidal ideas; there are two types of clues, such as verbal clue and non verbal clue. The verbal clues are passing negative statements, 'I want to die end my life, I am no more useful, this is the last time you will see me.' Non-verbal clues are addiction, sleeping too much/little, lack of interest in personal appearance, lack of interest in social activities, poor performance in school/work, boredom, restlessness, lack of concentration, withdrawing from friends and family, depressive mood. Hopelessness, helplessness, powerlessness, shame guilt, self hatred and lack of control.

Ulrich W. Preuss, (2003) conducted study on Predictors and Correlates of Suicide Attempts over 5 Years among 1,237 Alcohol-Dependent Men and Women, the result shows that, a past history of suicide attempts was an excellent predictor of such behaviour during follow-up. More than half of the alcoholics who attempted suicide during the follow-up had prior attempts, compared with only 14% of the subjects with no prior suicidal behaviour. An individual with a prior attempt had a 15.2% risk for a new attempt during the follow-up, compared with a 2.6% risk for the

subjects without a prior attempt. The importance of prior attempts as a predictor of future suicidal behaviour.

Isometsä Erkki, (2004) reported that the common method of suicide was drug overdose in 62% of the cases, hanging in 31%, and jumping in 8% and also 13% suicide succeeded the attempt at end of one year, two-thirds of the suicides occurred at least 15 years after the suicide attempt.

Neeraja K.P., (2008) stated that physical assessment on aggression client look for Intense distress, frowning, Flushed face, Gritting the teeth pacing, Eye brow displacement (raised, lowed, knitted) Clenching fist, Verbal & physical abuse of others, Jitteriness, Bleeding cuts. Behavioural assessment Poor resistant over his emotions, irritability, easily provoked, increased psychomotor actives, restlessness, sitting at the edge of the chair, louder voice, arguing, has no intention to listen others suggestions.

Townsend C. Mary, (2005) stated that the risk related to medication side effects and the signs and symptoms are 1. Extra pyramidal syndrome a) Psuedoparkinsonism. (difficulty in masticating movements, muscle fatigue, rigidity and mask like face., salivation, slurred speech, shuffling gait). b). Akathisia(difficulty in sitting still or strong urge to move). c). Dystonia (producing torticolis and extraocular spasm), 2.Tardive dyskinesia is characterised by involuntary rhythmic, stereotyped movements, 3.Neuroleptic malignant syndrome *(*NMS*) (*Dry mouth, blurred vision, constipation, urinary hesitance or retention and Hyperthermia more than 107^{0}F).

Bhatia, (2004) stated that in case of Lithium over dose symptoms may take up to 48 hrs to appear. Patient's serum level will be 1.5 to 2.5 meq/L exhibits milder signs and symptoms, lethargy, drowsiness, fine hand tremors, nausea, vomiting (or) diarrhoea. Increasing CNS involvement levels about 2.5 mew/L are considered fatal.

Ahuja N, (2006) stated that the following questions are used to assess the severity of substance abuse C - Has anyone ever felt you should Cut down on your drinking? A - Have people Annoyed you by criticizing your drinking? G - Have you ever felt Guilty about your drinking? E - Have you ever had a drink first thing in the morning (Eye-opener) to steady your nerves or to get rid of a hangover.

Minor alcohol withdrawal occurred within a few hours of the last drink and appearing as the BSC (blood alcohol concentration) drops to 100 mg/dl. Major alcohol withdrawal) hypermetabolic states characterised by intense motor activity, hallucination, combativeness and seizure and known as delirium tremens. Minor alcohol withdrawal individuals rarely seek professional help .They come to the psychiatric emergency service only when they are in crisis, they have no access to drug of choice. Opoid withdrawal not life threatening but it is uncomfortable to the individual they will not tolerated for long. The symptoms include abdominal cramp, diarrhoea, nausea, vomiting, muscle twitching, soreness in the joint, waves of hot and cold, goose flash, agitation and anxiety (Glick et al., 2008).

Types of Psychiatric emergencies:

Symptoms and conditions behind psychiatric emergencies may include attempted suicide, substance dependence, alcohol intoxication, acute depression, presence of delusions, violence, panic attacks, and significant, rapid changes in behaviour. Emergency psychiatry exists to identify and/or treat these symptoms and psychiatric conditions. In addition, several rapidly lethal medical conditions present themselves with common psychiatric symptoms (Twonsend, 2005).

Overdoses, drug interactions, and dangerous reactions from psychiatric medications, especially antipsychotics, are considered psychiatric emergencies. Neuroleptic malignant syndrome is a potentially lethal If not treated; this can result in fever, muscle rigidity, confusion, unstable vital signs, or even death. Often patients with severe general medical symptoms, such as unstable vital signs, will be

transferred to a general medical emergency room or medicine service for increased monitoring (Galick, 2008).

Role of nurses in Management Psychiatric emergencies

The majority of poisoned case requires only supportive care. Treatment consists of airway breathing and circulatory management along with antidote administration with the advent of ventilators pharmaceutical management of blood pressure, dialysis, hemoperfussion, cardiac monitoring, portable electroencpalopathy and other associated equipment (Glick Lipson Rachel, 2008).

Buklecky N.A., (2004) stated that administration 50-100 mg of activated charcoal orally or via nasogastric tube. This can absorb number of poison from gastrointinal tract. Toxins adhere to charcoal and excreted through the gastro intestinal tract.

Ilang-Ilang et al., (2004) states the immediate measures for poison is acting calmly and methodically and act according to the patient's needs. The highest priority is adequate breathing it must be maintained continuously. Avoid further skin contact and/or inhalation of fumes or dust. Places the patient on his side with the head lower than the rest of the body and maintain normal body temperature continuously. If breathing stops (patient's face or tongue may turn blue), pull chin forward to avoid the tongue dropping to the back of the throat. If breathing does not occur after opening the airway, then roll the patient onto their back, keep chin pulled forward and head back manner.

Bowers Len, (2008) stated that clinically nursing has long recognized dementia behaviours – agitation, aggression, wandering and general confusion to be significant patient problem as well as a major stress to nursing staff and caregivers. Although there is no cure, much can be done to improve their quality of life. Music therapy used to reduce agitation. Familiar music can evoke a more positive

response. This therapy can be used as an alter native to medication and restraints. It is inexpensive and easy to use.

Slee Nadja et al., (2008) conducted a study on efficacy of a short cognitive behavioral therapy intervention with 90 adolescents and adults who had recently engaged in self harm. Patient who received cognitive behavioural therapy in addition to treatment fund to have a significantly greater reduction in self harm ,suicidal thoughts and symptoms of depression and anxiety. This eventually improved their self esteem and problem solving ability compared with the control group.

Mohamed I., (2005) stated that the management of acutely agitated psychotic individuals is a major issue in emergency psychiatry. Initial management should focus on attempts to calm the patient through empathic, yet firm verbal means and establishing a collaborative relationship between patient and the treatment team. For example, when approaching an agitated psychotic patient, remember there is always a potential for violence and the approach should include speaking softly to the patient in non-judgmental way, it is better not to gaze in to the patients' eyes, it is of utmost importance to appear calm, unthreatened, in control and to be concerned about your own safety.

There is a continues adverse drug effects ranging from mild to severe. Clients most at risk for adverse medication reactions include the very young and elderly, women, clients taking multiple medications, clients extremely underweight (or) over weight and client with renal (or) liver disease. Where the Nurses should be alert to assess any unusual indications while administering medication (Potter and berry, 2005).

The FDA issued an alert to inform health care professionals of the occurrence of serious injection site reactions in patients receiving i.m. injections of Naltrexone an opoid receptor antagonist used to treat alcohol dependence. 196 cases had complaints of injection reaction including cellulites induration hematoma, abscess and necrosis have been reported 16 of which underwent I&D procedure. Nurses should be aware proper administration of drug, they should follow the instruction

gives in the naltrexone package insert 1.5 inch gauge needle only used for deep i.m. into gluteal muscle. Patients should be instructed to monitor the injection site for pain, swelling, tenderness indurations bruising etc. (Aschen Brenners S. Diane, 2008).

Electroconvulsive therapy is a controversial form of treatment which is sometimes applied in psychiatric emergency service settings. Instances wherein a patient is depressed to such a severe degree that the patient cannot be stopped from hurting himself or herself or when a patient refuses to swallow, eat or drink medication, electroconvulsive therapy could be used as a therapeutic alternative. While preliminary research suggests that electroconvulsive therapy may be an effective treatment for depression with suicidal ideas, it usually requires a course of six to twelve sessions of convulsions lasting at least 20 seconds for those antidepressant effects to occur (Potter M.).

Nursing interventions intended to prevent drug overdose in psychiatric settings are essential. Unfortunately psychiatric patient with suicidal intent sometimes succeed in overdosing on despite best nursing precautions e.g. not swallowing medication instead save them. It is important for the nurse to observe patients for changes in behaviour that are potentially related to their medications and listen for cues. Nurses who work in any psychiatric setting need to appreciate the importance of toxicology assessment and the potential for drug overdose (Mary Ann Boyd, 2005).

Person exposed to a trauma who comes to the emergency department should be met with sympathy and human caring, comfort and consolation, protection from further threat and distress. The provision of food shelter and clothing and helping the victim reunite with love one use sensible interventions. Allowing the person to describe the events and the attendant emotions is helpful especially when the caregiver can help the victim reunite normalize his/her emotions (Glick Lipson Rachel et al., 2006).

Mary Ann Boyd, (2005) stated that there is a significant risk of agranulocytosis with clozapine. Agranulocytosis is a potentially fatal blood disorder in which the client's white blood cell (WBC) count can drop to extremely low levels. Individuals receiving clozapine therapy are required to have blood levels drawn weekly to continue therapy. If the WBC, count falls below 3000 mm³ or the granulocyte count falls below 1500 mm³, clozapine therapy is discontinued. This disorder is reversible if discovered in the early stages.

Tobacco smoking is wide spread in rural India and occurs in the form of cheroot, cigarette or hookah smoking or tobacco chewing. Nicotine abuse causes only psychological dependence and no physical withdrawal is recognizable. Most tobacco smokers/chewers can be persuaded to give up their habit by educating them on the ill effects of abuse. Pharmacological treatment is rarely required and consists of Nortriptyline (25-50 mg/day) or Bupropion (150-300 mg/day) given over 4-8 weeks. Nicotine Replacement Treatments (NRT) like patch, gum, spray, lozenge and inhaler are reserved for only the die-hard smoker (Shiv Gautam, 2005).

Alcohol use is wide spread in India and alcohol is consumed in various forms like arrack, toddy, regional brew, beer, rum, whisky, gin, vodka, wines etc. alcohol being a prototypical substance is associated with the full range of manifestations of substance abuse including intoxication, harmful use, dependence, withdrawal, delirium, convulsions, psychoses and amnesic syndrome. The treatment consists of Diazepam (10-40 mg/day in 3-4 divided doses to be tapered at the rate of 20% per day over 3-7 days), multivitamin tablets and oral fluids along with total abstinence supervised by responsible relatives (Shiv Gautam, 2005).

Knowledge of nurses regarding management psychiatric emergencies:

A study conducted to evaluate an education programme on suicide prevention for nurses working in general hospitals. There were statistically significant positive changes in the pre and post-test measures of participant's attitudes and competence

levels. Qualitative data showed that participants had applied the new knowledge they acquired in clinical practice. They perceived themselves as being more aware of the problem of suicide and more competent in managing suicide risk. Ongoing education may be necessary to expedite changes. The education programme provided can be delivered to other health care professional groups and the results further evaluated (Sally Wai –Chi Chana, 2009).

A study conducted on prevention and management of aggression and violent incident in acute psychiatric wards. Where training programme was conducted for 31 months for staffs. The result showed that the use of manual restraint involves taking the patient down to the floor in a controlled manner, this control and restraint method been felt by the staff nurses more safer and confident in dealing with aggressive situations (Needham, 2005).

A study was conducted on efficacy of a short cognitive behavioural therapy intervention with 90 adolescents and adults who had recently engaged in self harm. Patient who received cognitive behavioural therapy in addition to treatment fund to have a significantly greater reduction in self harm, suicidal thoughts and symptoms of depression and anxiety. This eventually improved their self esteem and problem solving ability compared with the control group (Steve Johnson, 2004).

Needham et al., (2005) conducted a systemic review of literature by electronic search with 6616 articles from 8 countries on patient aggression on nurses revealed that 9.8% suffered physically and emotionally 68.6%, patient's assault on nurses made the nurse to feel decreased energy impaired concentration increased cautiousness socially impairment.

A retrospective analysis was conducted on prevention and management of aggression and violent incident in UK, in acute psychiatric wards. A training programme was conducted for 31 months for number of staffs at different occasion. The result shows that the use of manual restraint involves taking the patient down to the floor in a controlled manner, where he/she held until treatment is administered and the patient is calm, this control and restraint method been felt by the staff nurses

more safer and confident in dealing with aggressive situations (Goransson E. Katarina, 2007).

Townsend, (2005) stated that Restraints used when the behaviour no longer able to control and to prevent harm to others, to prevent Physical restraints are any manual methods or physical or mechanical device attached to or adjacent to the patient's body that she/he cannot easily remove Padding of cuff restraints helps to prevent skin breakdown. Whenever the control over violence is impossible by talk /physical means administer immediately Inj. Haloperidol 5 to 10 mg (i.m./i.v.) with/without Promethazine. Rapid neuroleptization with Haloperidol 20 mg i.v. and repeat every 20 mts to maximum of 120 mg per day till the violence (or) aggressive behaviour is controlled.

Summary:

The literature of the present study is reviewed meaning and Definition of Psychiatric emergencies, Incidence of Psychiatric emergencies, Types of Psychiatric emergencies.

Assessment of Suicide, Violence, Aggression, Iatrogenic emergencies, Substance withdrawal, Management of Psychiatric emergencies, Role of nurses in Management Psychiatric emergencies. Knowledge of nurses regarding Management Psychiatric emergencies.

METHODOLOGY

The methodology of research indicates the general pattern of organizing procedure for gathering valid and reliable data for the problem under investigation (Kothari, 2003).

In this study the methodology includes the research approach and design, setting of the study, population, sample, sampling technique, developing and testing the tool, data collection procedure and method of analysis based on the statement and objectives of the study.

Research design and approach

Research design is the researchers overall plan for obtaining answers to the research questions or for testing hypothesis (Polit & Hungler, 2004).

A quasi experimental with pre and post test without control group design and experimental approach was used for the present study to test the effectiveness of Self instructional module on management of psychiatric Emergencies.

$$O_1 \qquad X \qquad O_2 \qquad (E=O_2-O_1)$$

The symbols used are as follows:

O_1 -- Assessment regarding management of psychiatric emergencies on knowledge among staff nurses through closed ended questionnaire before administration of SIM.

X -Distribution of self instructional module regarding management of psychiatric emergencies.

O_2 - Assessment regarding management of psychiatric emergencies on knowledge among staff nurses through closed ended questionnaire after Administration of SIM.

E – Effectiveness of the Self Instructional Module.

Setting of study

The study was conducted in PIMS and AMCH. It is 30 Km away from Cuddalore. These hospitals have 600 beds for all kind of patients and also have psychiatric wards for Men and Women 30 beds for each. Sneha mind centre consist of 200 beds approximately. Where the treatment is given exclusively for psychiatric patient alone. Danvandri mental hospital consist of 200 beds approximately all kinds of psychiatric treatments are given .These two hospitals are in Trinelveli district, it is10 Km away from the city bus station.

Population

Population refers to the aggregate (or) totality of all objects, subjects or members that conform to a set of specifications (Polit & Hungler, 2004).

Population for this study was the entire staff nurses who were qualified as staff nurse and working in Psychiatric ward at selected hospitals.

Sampling

i) Sample

Sample is a subset of the population selected for a particular study and members of the sample are the study subjects (Kulkarni, A.P. et al., 2005).

Staff nurses who were qualified and working in Psychiatric ward, was the sample for the present study.

ii) Sampling size

The sampling size was 45 staff nurses who were present during the period of data collection.

. iii) Sampling technique

Sampling refers to the process of selecting a portion of the population to represent the entire population (Polit & Hungler, 2004).

Purposive sampling technique was used to carry out this study. Purposive sampling indicates selection by design by choice, not by chance. In purposive sampling a sample is chosen which is thought to be typical of the universe with regard to the characteristics under investigation.

In the present study the investigator is interested to educate the Staff nurses regarding management of psychiatric emergencies as they are considered as one of the medical profession involve in dealing with psychiatric emergencies most of the time.

iv) Criteria for selection of sample

Inclusion criteria

Staff nurses of both sexes will be –

- available during data collection period.

- willing to participate in the study.

- successfully completed any one of the basic nursing programme.

Method of Data Collection

A) Development of the tools

The following tools were used for the present study:

I. Close ended questionnaire to assess the knowledge of the staff nurses regarding management of psychiatric emergencies.

II. Self instructional module on management of psychiatric emergencies.

Construction of Self instructional module:

Preparation of module

The module will be prepared to assess the knowledge of staff nurses regarding management of psychiatric emergencies.

    i.   Review of related literature.

    ii.   Construction of tool.

    iii.   Consultation with guide.

i. Review of literature

Related books, journals, reports, articles published and unpublished studies will be used to develop the tool.

ii. Construction of tool

The content of the self Instructional Module was organised as follows

– Meaning of psychiatric emergencies

-- Types of psychiatric emergencies

– Assessment of psychiatric emergencies on

     o   Suicide

- o   Violence

- o   Aggression

- o   Iatrogenic emergencies

- o   Substance withdrawal

-      Management of psychiatric emergencies

B) Closed ended questionnaire

Closed ended questionnaire has two sections.

Section A: It consisted of demographic characteristics of samples such as age, sex, religion, areas of working, years of experience, previous source of information on management of psychiatric emergencies.

Section B: It consisted of closed ended multiple choice questions pertaining to knowledge of staff nurses regarding meaning, types, assessment and management of psychiatric emergencies. Each item has four options with one most appropriate answer.

Number of question in each area is presented in the table no. 3.1.

Table 3.1. Area wise description of number of questions

Sl. No.	Contents	Items	Actual Score
1.	Meaning and types	2	2
2.	Assessment of psychiatric emergencies	24	24
3.	Management of psychiatric emergencies	39	39
	Total items	**65**	**65**

Scoring procedure:

The tool consists of 65 items. Each item will have four options with one correct option. Each correct option carries 'one score' and wrong option 'zero score'. The

level of knowledge was categorized based on the percentage of scores to be obtained. The score was grouped in to very poor, poor, average, good and very good based on knowledge scores.

Scoring:

Table 3.2. Percentage of Scores Revealing Level of Knowledge.

Level of knowledge	Percentage of scores	Actual score
Very poor	<21%	0-13
Poor	21-40%	14-25
Average	41-60%	26-39
Good	61- 80%	40-52
Excellent	81% and above	53 -65

iii. <u>Consultation with experts</u>:

The blue print item was given to the experts in various fields such as – Psychiatrist, Psychology, Psychiatric Nursing, Biostatistics and Education. Their opinion and suggestions were taken to prepare the questionnaire. The research guide and committee members will also be consulted before finalizing the tool.

Translation of the tool:

After validation of the closed ended questionnaire, since English is the official it was constructed in language of English.

a)   Validity

Validity is the truthfulness of measure in measuring the phenomenon of interest in a given sample or population (Laura A. Talbot, 1995).

Content validity of the closed ended questionnaire and self instructed module was established by sending the closed ended questionnaire and content of self instructed module to experts from various fields like Psychiatrist, Psychology, Psychiatric Nursing, Biostatistics and Education. The validated tool was modified according to the suggestion and recommendation of experts.

After validation changes were made as follows:

Table 3.3 Modifications done after Validation of Tool

Section	Question no.	Changes made
B	04	Modification in options
B	11	Added
C	61	Removed
C	33	Modification in option

b)   Reliability

The reliability of the measuring instrument is a major criteria for assessing the quality and adequacy. The reliability is concerned with how consistently an instrument measures the concept of interest (Burns N. and Grove.S.K., 2002).

Test re-test method (Karl Spearson's co-relation co- efficient formula) was used to find out the reliability of the closed ended questionnaire on 5 staff nurses working in Vazhigati mental health hospital, Kovai, which is other than the sample area and the correlation value was r = 0.84.

c)   Preparation of the final draft

The final draft of the closed ended questionnaire and the self instructional module was prepared after testing the reliability and validity.

C) Data Collection Procedure

❖ **Ethical consideration**

Prior to data collection written permission was obtained from the Directors of the each Hospital and from the Head of the department of PIMS, AMCH, Sneha mind centre and Danvandri mental Hospital. Further, before collection of data informed consent was obtained from the staff nurses.

❖ **Period of data collection**

The data was collected from 20/09/09 to 8/10/09. During this period investigator collected both pre and post test data and also Self Instructional Module was distributed.

❖ **Pre- test**

The staff nurses were gathered in a common hall and they were made to sit comfortably. The procedure was explained to them in detail. Closed end questionnaires were distributed. The nurses not encouraged to discuss among themselves the time duration was 45 minutes. After 45 minutes the answer were collected back by the investigator. From each hospital data was collected in one day by two session .Nurses of the evening shift and morning shift one session and night shift on the other session. Thus for 4 hospitals data were collected for 4 days.

❖ **Implementation of SIM**

Immediately after the pre-test, self instructional module booklet (SIM) was distributed to the each staff nurses. Booklets consist of details regarding management of psychiatric emergencies. Nurses were instructed to read the booklet.

❖ **Post- test**

Post test was conducted by using the same closed ended questionnaire and for the same staff nurses who were present during pre-test after presentation of self

instructional module, after 8 days of implementation of the self instructional module. The test conducted similar to pre-test.

Planed data analysis

The collected data was planned to be organized, tabulated and analyzed by using descriptive statistics i.e. percentage, mean and standard deviation and inferential statistics i.e. Chi-square test and paired't' test. The paired't' test was used to find out the difference in knowledge between pre and post test. The chi- square test was used to test the association between demographic variables of children with their post test knowledge scores. The data was presented in the form of tables and figures in chapter IV.

Summary

A quasi experimental with pre and post test without control group design and experimental approach was carried out on 45 staff nurses to test the effectiveness self instructional module on management of psychiatric emergencies. Closed ended questionnaire was prepared and reliability and validity was established. The data was analyzed by using descriptive and inferential statistics and was presented in the form of tables, graphs and figures.

ANALYSIS AND INTERPRETATION

Analysis is a "process of fitting data together of making the invisible obvious of linking and attributing consequences to antecedents. It is a process of conjecture and verification, of correction and modification, of suggestion and defense" (Morse J.M. & Field P.A., 2005).

This chapter deals with analysis and interpretation of data collected from 45 nurses working in psychiatry ward at selected hospitals at Trinelveli and Cuddalore district. The present study was designed to assess their knowledge regarding management of Psychiatric emergencies. The collected data was tabulated, organized, analyzed and interpreted using descriptive and inferential statistics.

Analysis and interpretation of the data is based on the objectives of the study. The data is presented under the following sections:

Section 1:

Distribution of the nurses according to their demographic variables.

Section 2:

Assessment of knowledge of the nurses regarding management of psychiatric emergency prior to the distribution of SIM.

➢ Area wise comparison of mean, SD and mean percentage of pre-test KS of the nurses regarding management of psychiatric emergencies.

Section 3:

Assessment of the effectiveness of SIM on knowledge among nurses regarding management of psychiatric emergencies.

1. Area wise comparison of mean, SD and mean percentage of pre and post test Knowledge scores of the nurses regarding management of psychiatric emergencies.

2. Item wise comparison of pre and post test Knowledge Scores of the nurses regarding management of psychiatric emergencies.

Section 4:

Comparison of the effectiveness of SIM with demographic variables of the Nurses regarding management of psychiatric emergencies.

Section 5:

Testing of Hypotheses:

To assess the effectiveness of SIM on regarding management of psychiatric emergencies on knowledge among nurses. Hypotheses testing were done by using paired 't' test and chi-square test.

$H0_1$: There is no significant difference between the pre and posttest Knowledge scores of the nurses regarding management of psychiatric emergencies

H0₂: There is no association between the posttest Knowledge scores and selected demographic variables of the nurses regarding management of psychiatric emergencies.
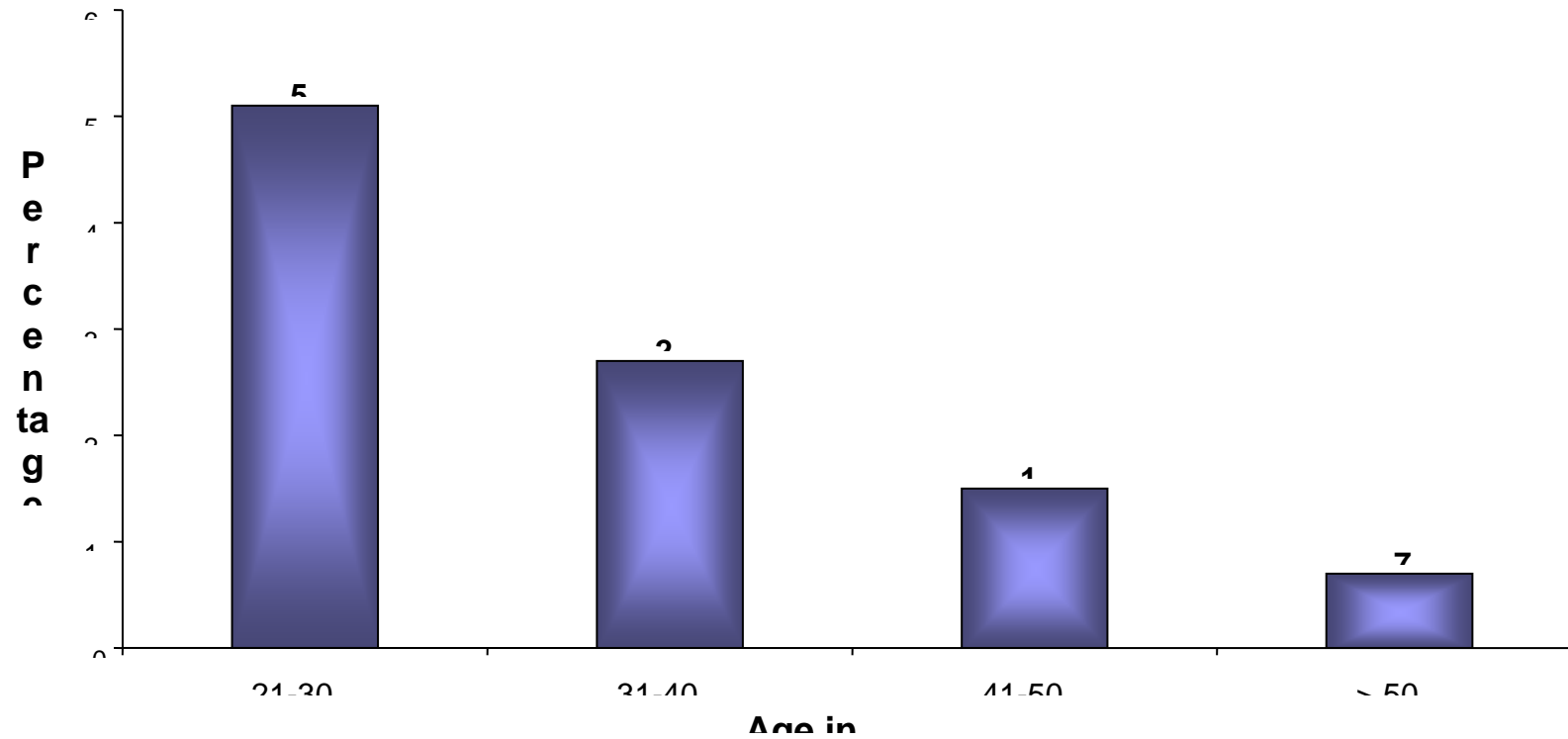
Section 1: Distribution of the nurses according to their demographic variables

Percentage wise distribution of nurses according to their age group shows that highest percentage (51%) were in the age group of 21-30 yrs and lowest percentage (7%) were in the age group of 50 and above years, further 27% were 31-40 yrs of age group and 15% of the nurses were in the age group of 41-50. Hence it is interpreted that most of the nurses were younger within the age group of 21-30 yrs. As the age is increasing the number of staff nurses decreases (Fig No. 4.1.1).

Percentage wise distribution of staff nurses according to their sex shows that most of the nurses were females (80%) when compared to males (20%). It seems that most of the nurses were female. It might be due to that mostly females are motivated for nursing as a carrier (Fig. no. 4.1.2.).
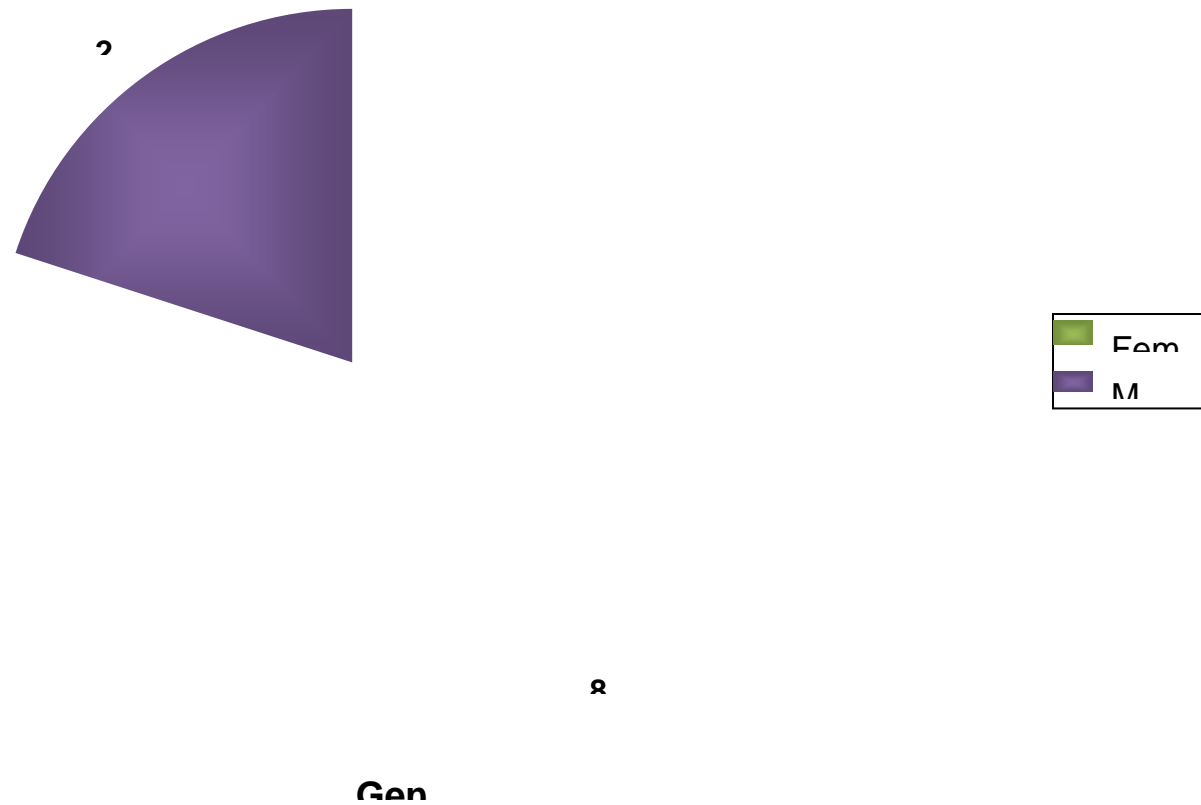
Percentage wise distribution of the nurses according to the religion shows that the highest percentage nurses (44%) were Hindus, whereas lowest percentage (16%) of them was Muslims. However 40% 0f the staff nurses were Christians. It seems that most of the nurses were Hindus. It might due to religious distribution in India (Fig. 4.1.3).

Percentage wise distribution of nurses according to their educational status shows that majority of the staff nurses (62%) of them had diploma course and 38% were graduate nurses. It seems that majority of them under study were diploma nurses that might be associated with the preference of hospital towards GNM`s nurse (Fig: 4.1.4).
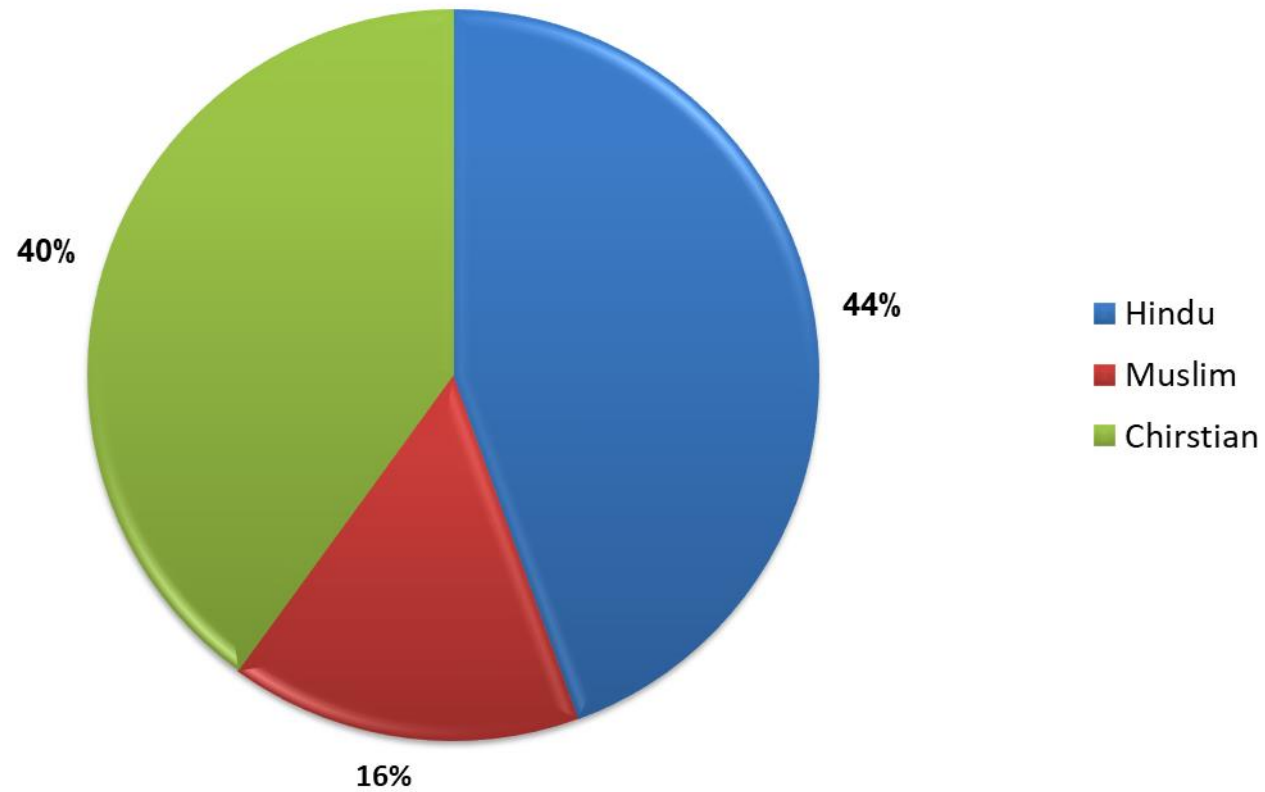
Fig. No 4.1.1: Bar diagram showing percentage wise distribution of staff nurses according to their age group.

2

Fem
M

8

Gen
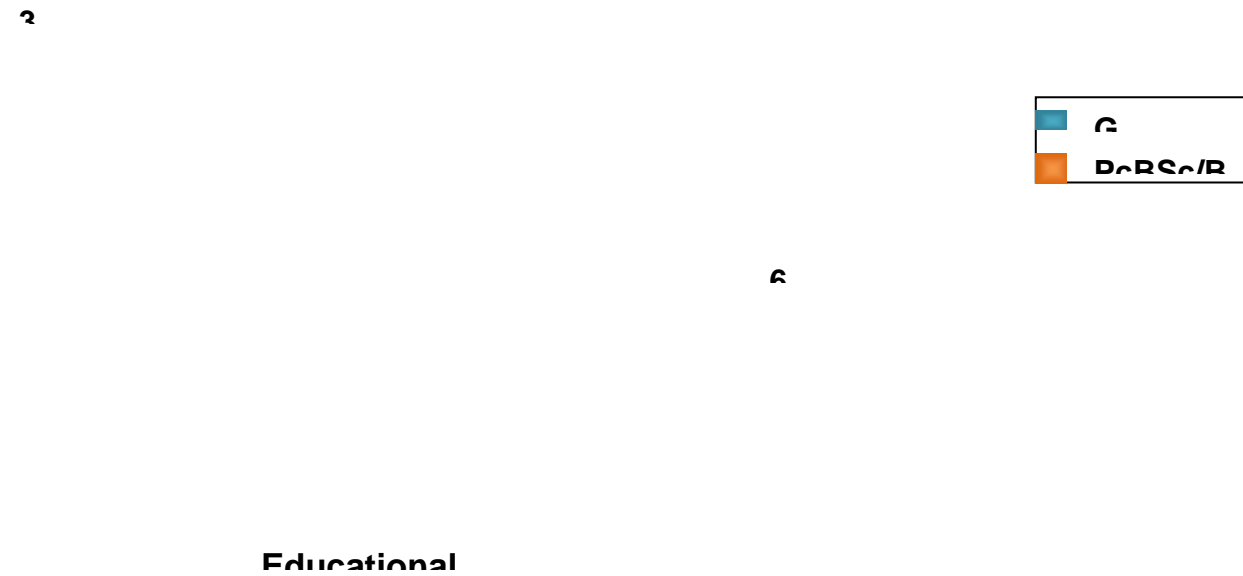
Fig. No. 4.1.2:   Pie diagram showing percentage wise distribution of nurses according to their sex.

Religion

Fig. No. 4.1.3: **Pie diagram showing percentage wise distribution of staff nurse according to their religion.**

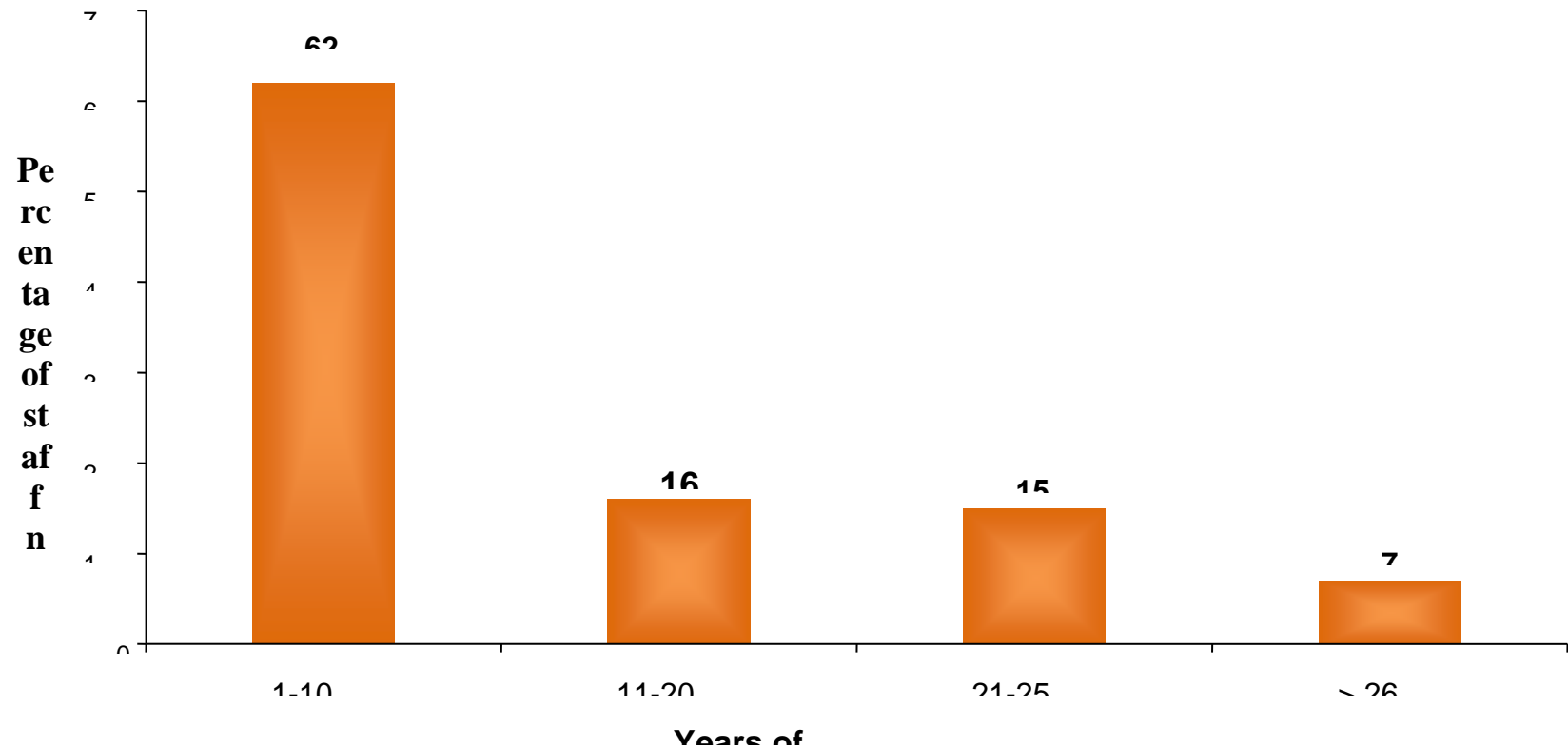3

G

PcBSc/B

6

Educational

Fig. No. 4.1.4: Pie diagram showing percentage wise distribution of nurse according to their educational level of nurses.
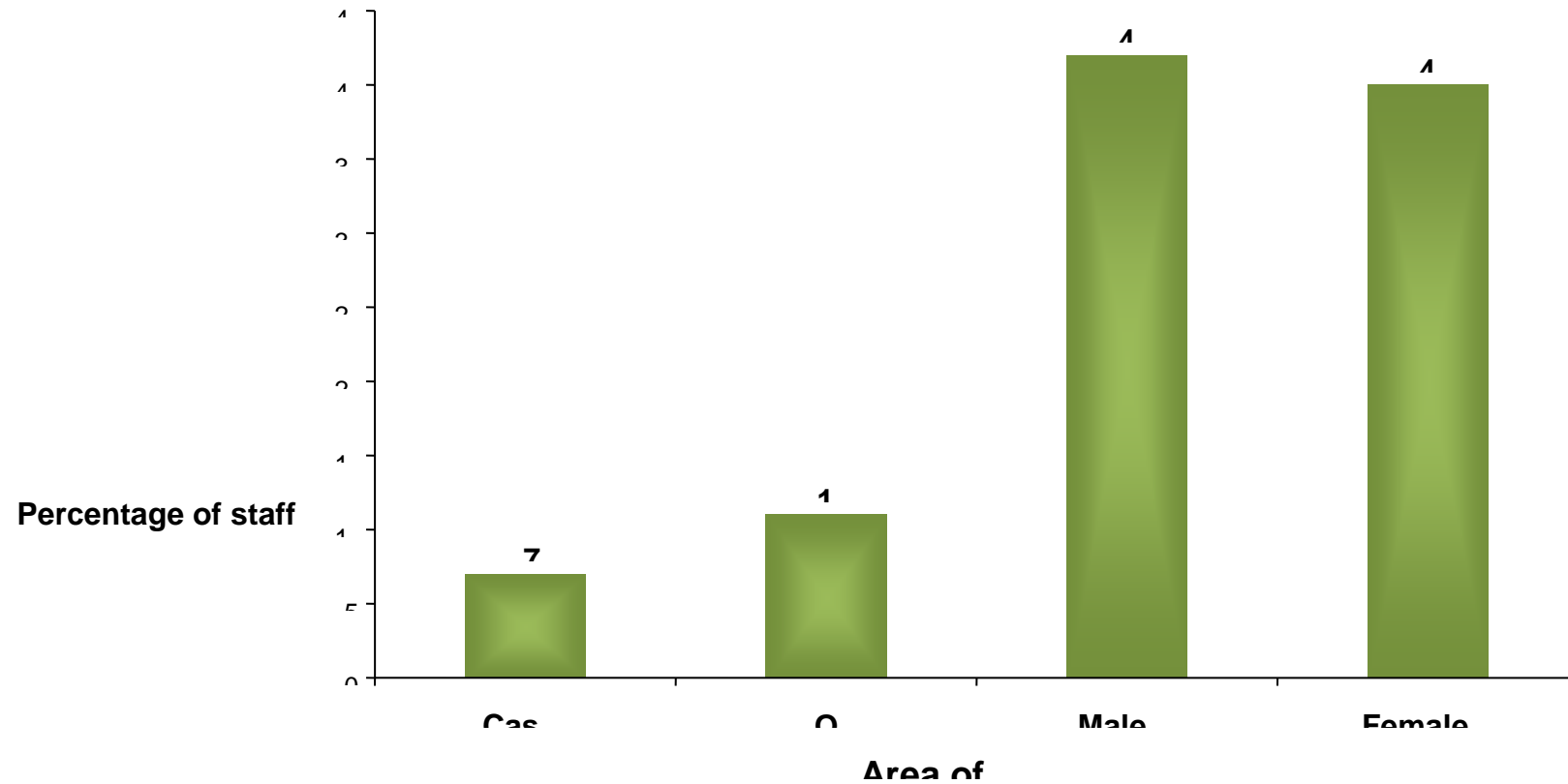
Percentage wise distribution of nurses according to the years of experience shows that majority (62%) of them had 1-10 years of experience; whereas only 7% had above 26 years of experience further more or less similar percentage (16% and 15%) of staff nurses were belong to the age group of 11-20 years and 21-25 years of experience respectively. It seems to be majority of the nurses were had 1-10 years of experiences. It might be due to majority of nurses under the study were in the age group of 21-30 years (Fig. No. 4.1.5).

Percentage wise distribution of nurses according to their Area of working shows that more are less similar percentages of the nurses worked in male ward (42%) and female ward (40%) whereas, 11% were working in OPD and ECT room, However only 7% was working in causality. It seems that most of the nurses were working male ward and female ward. It might be because to provide the constant inpatient care (Fig. No.-4.1.6).

Percentage wise distribution of staff nurse according to their previous source of information shows that majority of the nurses didn't attend the in service programme (73%) when compared to the nurses who have attended (27%). It seems that most of the nurses had no previous information. It might be due to that lack of opportunity (Fig. no. 4.1.7.)

Fig. No. 4.1.5: Bar diagram showing percentage wise distribution of nurses according to their work experience.

Fig. No. 4.1.6: Bar diagram showing percentage wise distribution of nurses according to their areas of working.
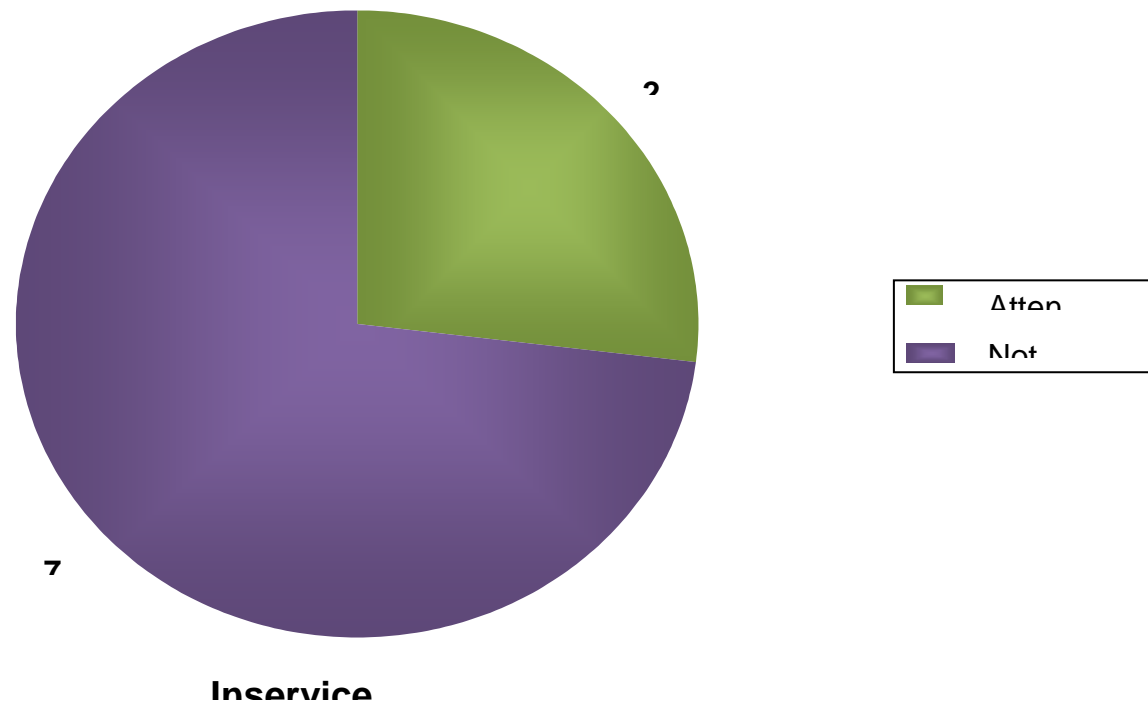
Fig. No. 4.1.7: Pie diagram showing percentage wise distribution of nurse according to their previous source of information.

Section 2:
Assessment of knowledge of the nurses before implementation of SIM

Area wise comparison of mean, SD and mean percentage of pretest Knowledge Score of nurses regarding management of psychiatric emergencies.

Table No. 4.2.1:   Area wise comparison of mean, SD and mean percentage of pre-test Knowledge Score of nurses regarding management of psychiatric emergencies.

S.N	Area		Scores			
			Max. Scores	Mean	SD	Mean %
A	Assessment					
		Meaning of Psychiatric emergencies.	2	1.15	1.13	57.7
		Suicide	8	3.48	1.42	43.6
		Violence	3	1.37	0.79	46.0
		Aggression.	3	1.37	0.82	45.9
		Iatrogenic Emergencies	8	3.35	0.45	42.0
		Substance withdrawal	2	0.82	0.73	41.1
B.	Management					
		Suicide	8	3.33	1.03	41.6
		Violence	10	4.31	1.51	43.1
		Aggression.	4	1.68	083	42.2
		Iatrogenic Emergencies	10	3.91	1.42	39.1
		Substance withdrawal	7	3.22	1.09	46.0
		overall	65	28.0	4.l2	43.1

Area wise distribution of mean, SD and mean percentage of pretest knowledge score of nurses regarding management of psychiatric emergencies. It consists of Area A and B. Area A "Assessment" has 6 sub areas shows that the highest mean score (1.15±1.13) which is 57.7% of the total score was obtained in the area meaning of psychiatric emergencies Whereas, lowest mean score (0.82±0.73) was 41.1% obtained in the area of "Assessment of Substance withdrawal". Further, more or less similar mean score (3.48 ±1.42, 3.35±0.45) which

is 43.6% and 42% were obtained in the area of "assessment of suicide'' and "Iatrogenic Emergencies".

Area B Management it consists of 5 sub areas shows that during the pre test highest mean score (3.22±.1.09) was 46% was obtained in the area of "management of substance withdrawal". Whereas, lowest mean score (3.9±1.4) was 39.1% was obtained in the area of "management of Iatrogenic Emergencies". Further more or less similar mean score (3.33 ±1.03, 1.68±0.83, 4.31 ±1.51) are 41.6%, 42.2 % and43.1 were obtained in the area of "assessment of suicide'' "Aggression" and "Violence."

Overall KS mean (28± 4.1) was 43.1 % reveals that the staff nurse understudy had average knowledge regarding Management of psychiatric emergencies". (Table No. 4.2.1).

Section 3

Assessment of the effectiveness of SIM

To assess the effectiveness of SIM on the knowledge of staff nurses regarding management of psychiatric emergencies the formula Y – X = E was used, where Y = Post-test, X = Pre-test and E = Effectiveness.

a. Area wise comparison of mean, SD and mean percentage of pre-test and post-test knowledge score of nurses regarding management of psychiatric emergencies.

b. Item wise comparison of pre-test and post-test knowledge score of the staff nurses regarding management of psychiatric emergencies.

1. **Area wise comparison of mean, SD and mean percentage of pre-test and post-test knowledge score of staff nurses regarding management of psychiatric emergencies**.

Table No. 4.3.1 : Area wise comparison of mean, SD and mean percentage of pre-test and post-test knowledge score of staff nurses regarding management of psychiatric emergencies.

Area	Sub-areas	Max. score	Pre-test			Post-test			Difference in Mean%
			Mean	SD	Mean %	Mean	SD	Mean %	
A.	Assessment								
	Meaning	2	1.15	1.13	57.7	1.77	0.65	85.5	27.8
	Suicide	8	3.48	1.42	43.6%	6.68	0.96	83.6	40
	Violence	3	1.41	0.79	46.0	2.31	0.81	77	31
	Aggression.	3	1.37	0.82	45.9	2.4	0.61	80	34.1
	Iatrogenic Emergencies	8	3.35	0.45	42.0	5.13	1.12	64.1	22.1
	Substance with drawl	2	0.82	0.73	41.0	1.78	1.73	86.6	45.6
B.	Management								
	Suicide	8	3.33	1.03	41.6	6.13	1.24	76.6	35
	Violence	10	4.31	1.51	43.1	7.95	1.07	79.5	36.4
	Aggression.	4	1.68	0.83	42.2	3.24	0.70	81	38.8
	Iatrogenic Emergencies	10	3.91	1.42	39.1	7.66	1.11	76.6	37.5
	Substance with drawl	7	3.22	1.09	46.0	5.75	0.88	82.2	36.2
	Over all	**65**	**28.0**	**4.l2**	**43.1**	**50.7**	**3.41**	**78.1**	**35.0**

Area wise distribution of mean, SD and mean percentage of pretest and post test knowledge scores of staff nurses regarding management of psychiatric emergencies. It consists of two Areas A and B. Area A "Assessment of psychiatric emergencies" it has 6 sub areas shows that the highest post test mean score (1.78±1.73) which is 86.6% was obtained in the area of "Assessment of Substance withdrawal", and also had highest effectiveness of 45.6%, it might be due to lowest pretest response whereas, lowest mean score (5.13±1.1) which is 64.1% was obtained in the area of "Assessment of Iatrogenic emergencies" and also had lowest effectiveness which is 22.1%. It might be because difficulty in understanding the items in that area.

Area B Management of psychiatric emergencies has 5 sub areas shows that the highest mean score response (5.75±0.88) which is 82.2% for the item "Substance with drawl" and the effectiveness was 36.2%. However highest effectiveness 38.8% was obtained in the area of "Management of Aggression". It might be because easy understanding of the items in that area. Whereas, more or less similar lowest mean score (6.1±1.2, 7.66 ±1.11) which are 76.6% obtained in the area "Management of Suicide' and Iatrogenic Emergencies and the effectiveness was 35% and 37.5%. It might be lowest pretest response (41.6% and 39.1%respectively). However, the effectiveness varies from 27.8% to 36.4% for the other area and overall mean score reveals the effectiveness of Self Instructional Module (Table No. 4.3.1).

Line Graph showing the comparison of pre and post test KS regarding management of psychiatric emergencies.

Line graph was drawn to compare the pretest and post test KS to assess the effectiveness of SIM shows that the lowest pretest score values were between 15-20 obtained by 2.2% of Staff nurses and highest score values were between 35-40 obtained by 8.89% of staff nurses. However, during post test the highest score

values were between 55-60 obtained by 8.89% of staff nurses and the lowest score values were between 40-50 obtained by only 2.2% of staff nurses. The highest percentage (51.11%) of the staff nurse's scores was between 25-30 during pretest and between 50-55 during post test (46.67%).

Further, the mean & median plotted on the graph shows that during pretest mean and median values were 28.04 & 27 whereas, during post test it was 50 and 51, respectively revealing the difference of approximately 25 scores. Hence, it can be interpreted that the SIM was effective in improving the knowledge of staff nurses regarding management of psychiatric emergencies (Fig. No. 4.3.1).
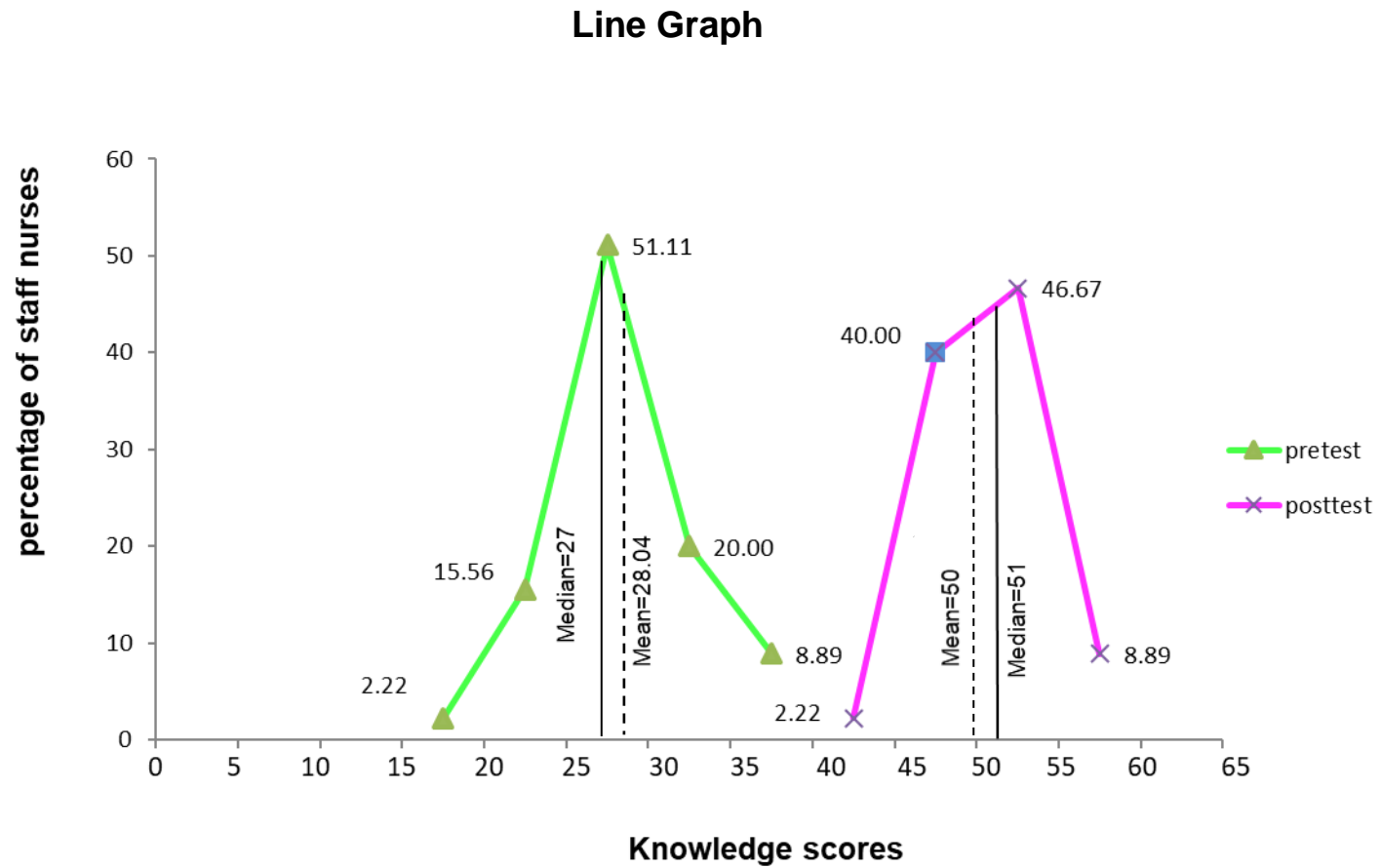
Line Graph

Fig No. 4.3.1 Line diagram showing the comparison of pre and post test Knowledge Score.

O-give diagram showing the comparison of pre and post test KS regarding management of psychiatric emergencies.

O-give curve showing the comparison of pretest and post test cumulative percentage of KS of staff nurses regarding management of psychiatric emergencies showing that the O-give curve values on post test score was consistently higher than the pretest scores. In the pretest 25th percentile score was 21 whereas, it was 47 for the post test revealing a difference of 26, the 50th percentile score for pretest was 23, which was 51 for the post test revealing a difference of 28. Similarly, the 75th percentile score for pretest was 26 and 54 was for the post test revealing a difference of 32, revealing the effectiveness of SIM regarding management of psychiatric emergencies.
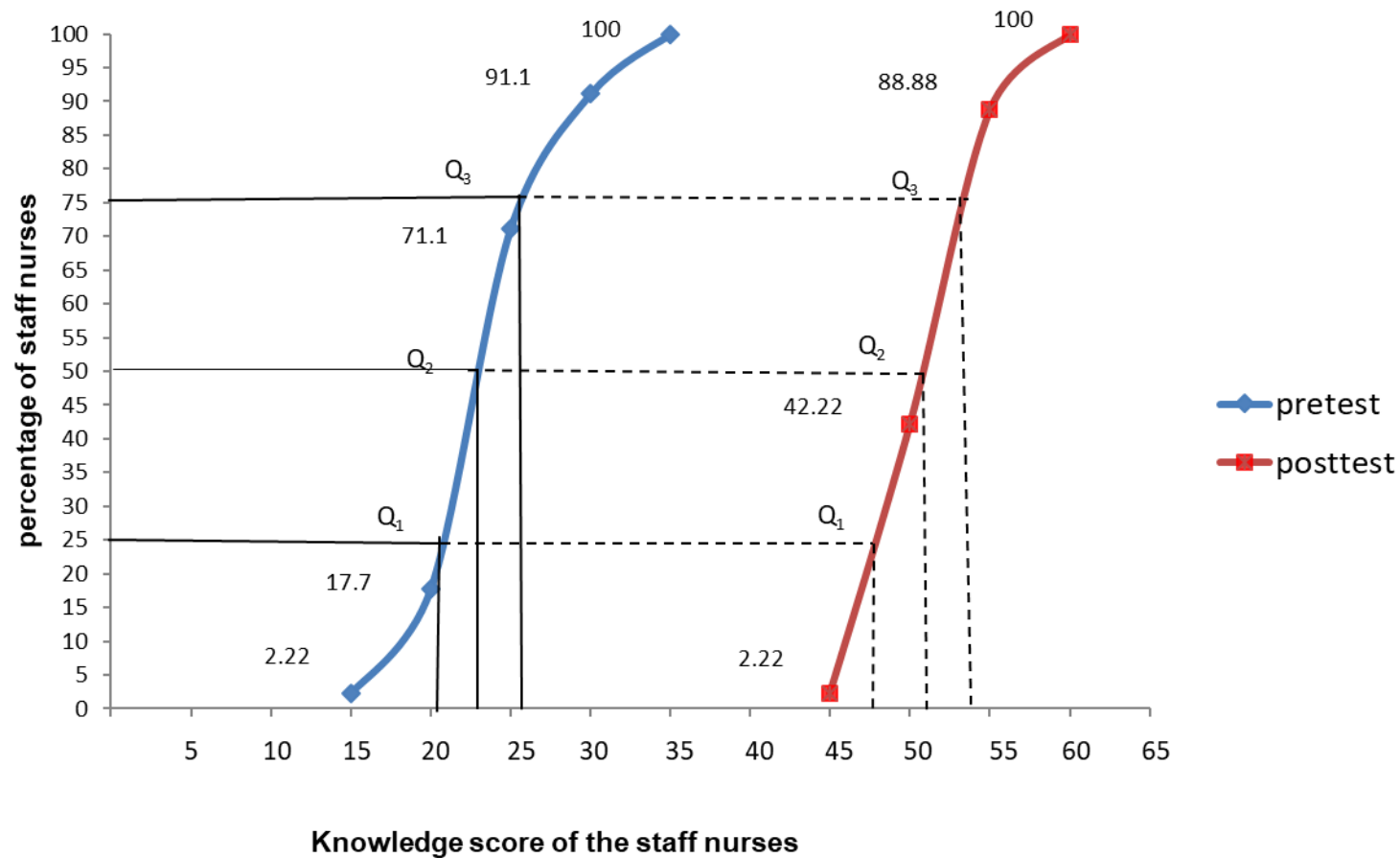
Fig No. 4.3.2 O-give diagram showing the comparison of pre and post test Knowledge Score.

2. **Item wise comparison of knowledge score regarding management of psychiatric emergencies**.

Table No. 4.3.2 : Item wise comparison of pre-test and post-test correct knowledge responses (in %) of staff nurses regarding meaning and types of psychiatric emergencies.

Item	Pre-test correct responses (X) %	Post-test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Stress induced pathogenic life threatening emergencies.	55.5	86.6	31.1
Psychiatric emergencies are Suicide attempt, aggression violence, iatrogenic emergencies, and withdrawal symptoms**.**	60	84.4	23.4

Item wise comparison of pre and post test knowledge score of the nurses regarding meaning and type of psychiatric emergencies shows that during the post test most of the (86.6% and 84.4%) nurses were obtained more or less similar response for the items "psychiatric emergency means it is Stress induced pathogenic life threatening emergencies" and psychiatric emergencies are suicide attempt, aggression violence, iatrogenic emergencies, withdrawal symptoms" and the

effectiveness 31.1% and 23.4% respectively it might be due to more or less similar pretest response (55.6% and 60%) It reveals that SIM was effective for the both the item related to meaning and types of psychiatric emergencies (Table No. 4.3.2).

Table No. 4.3.3: Item wise comparison of pre-test and post-test correct knowledge responses (in %) of staff nurses regarding Assessment of suicide.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Suicide is deliberate self harm with fatal out comes.	53.3	93.3	40.0
Verbal clue for suicide is I am no more useful.	40.0	80	40.0
Non-verbal clues for suicide is always being isolated.	31.1	84.2	53.1
The common method of suicidal attempt are drinking poison, hanging & falls.	42.0	82.2	40.2
The common sign of client with poison is frothy mouth.	37.7	84.2	46.5
Strangulation mark on the neck & breathing difficulty are the commonly observed in the case of hanging.	53.3	77.0	23.7
At the first sight Airway, breathing & circulation are observed to be in suicidal client	46.6	80.0	33.4
Fracture & bleeding is to be noticed in attempted suicide by falling.	46.6	86.6	40

Item wise comparison of pre and post test Knowledge Score the staff nurses regarding Assessment of suicide shows that during post test all most all responded (93.3%) correctly for the item "Suicide is deliberate self harm with fatal out comes" showing 40% of effectiveness whereas, the highest effectiveness (53%) was for the item "Non-verbal clues for suicide is always being isolated" which might be due to

lowest pre test response. However, lowest response was obtained (77%) for the item "Strangulation mark on the neck & breathing difficulty" are the common observed in the case of "hanging", and the effectiveness also was lowest 23.7%. It might be due to highest pre test response (53.3%). However the effectiveness varies from 33.4% to 46.5% for the other area revealing effectiveness of self instructional module in the area of "Assessment of suicide" (Table No.4.3.3).

Table No. 4.3.4: Item wise comparison of pretest and post test correct knowledge responses of staff nurses regarding Assessment of Violence.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Anger & intention to hurt others are the general appearance of the client with violence.	55.5	84.4	28.9
Bruise over the body are to be observed in the physical assessment.	40.2	75.0	34.8
Louder voice & throwing /striking objects on other to be observed in the violent client	44.4	71.1	26.7

Item wise comparison of pre and post-test response regarding "assessment of violence" shows that during post test most of the nurses (84.4%) responded correctly for the item "Anger & intention to hurt others are the general appearance of the client with violence" with an effectiveness of 28.9% whereas, the highest effectiveness was obtained for the item "Bruise over the body are to be observed in the physical

assessment" it might be due to lowest pre test response. Further, the lowest post test correct response (71.1%) was for the item "Louder voice & throwing /striking objects on other to be observed in the violent client" and the effectiveness was also lowest (26.7%). It might be due to difficulty in understanding the item. However, overall response reveals the effectiveness of SIM in the area of assessment of Violence (Table No. 4.3.4).

Table No. 4.3.5: Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding Assessment of Aggression.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Aggression means Causing harm (or) pain to self/others.	44.4	77.7	33.3
Frowning & clenching fist is to be observed.	42.2	82.2	40
Lack of interest in listening to be observed communicating with aggressive client.	51.1	80.0	28.9

Item wise comparison of pre and post-test Knowledge Scores regarding "Assessment of Aggression" shows that during post test most (82.2%) of them responded correctly for the item "In the client with aggression frowning & clenching fist Is to be observed" and the effectiveness also was highest 40% it might be due to lowest pretest response (42.2%). Further, the lowest post test correct response (77.7%) was for the item "Aggression means Causing harm (or) pain to self or others" and the effectiveness was 33.3%. However the lowest (28.9%) effectiveness

was obtained for the item "Lack of interest in listening to be observed communicating with aggressive client" might be due to highest pretest response (51.1%). Hence it can be interpreted that SIM was effective to the all the item regarding assessment of Aggression (Table No. 4.3.5).

Table No. 4.3.6: Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding Assessment of iatrogenic emergencies.

Item	Pretest correct responses (X) %	Posttest correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Iatrogenic emergencies are a drug induced emergencies.	37.7	73	35.3
The side effects are Extrapyramidal syndrome, tardive dyskinesia, Neuroleptic malignant syndrome & lithium toxicity.	37.7	62.2	24.5
The group of symptoms observed in EPS are Pseudoparkinsonism, akathesia and dystonia.	46.6	71.1	24.5
The musculo-skeletal problems such as difficulty in mastication will be observed in pseudoparkinsonism and dystonia.	40.0	55.5	15.5
Muscle contraction is to be observed in client with dystonia.	37.7	60	22.3
The type of movement to be observed in tardive dyskinesia stereo type movement	40.3	71.1	31.2
Dry mouth constipation, retention of urine, hyper pyrexia are to be observed NMS	38.0	57.7	30
The toxic level of lithium in the blood is above 2.5 meq/l.	42.2	62.2	20

Item wise comparison of the pretest and posttest correct responses regarding Assessment of iatrogenic emergencies shows that during posttest majority (73%) of them responded correctly for the item "iatrogenic emergencies are a drug induced

emergencies and the effectiveness also highest(35.3%) it might be due to lowest pretest response (37.7%). Further, lowest correct (55.5%) response was obtained for the item "the musculo-skeletal problems such as difficulty in mastication will be observed in Pseudoparkinsonism and dystonia and also revealing the lowest effectiveness (15.5%) which might be due to difficulty in understanding the item. However, more or less similar post test response (62.2%) was obtained for the items "The side effects are Extrapyramidal syndrome, tardive dyskinesia, Neuroleptic malignant syndrome & lithium toxicity" and "The toxic level of lithium in the blood is above 2.5 meq/l" and the effectiveness also was more or less similar (24.5 and 20 respectively). However, the effectiveness varies from 22.3% to 31.2% overall it reveals the effectiveness of SIM (Table No. 4.3.5).

Table No. 4.3.7: Item wise comparison of pre and post test KSs of staff nurses regarding Assessment of Substance withdrawal syndrome

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Delirium tremens, vomiting, hypoglycaemia & Korsakoff syndrome are the symptoms to be noticed	40.3	88.8	40.5
Confusion and hallucination are commonly observed to identify delirium tremens	42.2	84.4	42.2

Item wise comparison of pre and post test KSs of the staff nurses regarding "Assessment of Substance with drawl syndrome "shows that during post test, responses were more or similar for the items (88.8% and 84.4%) "Delirium

tremens, vomiting, hypoglycaemia & Korsakoff syndrome are the symptoms to be observed in the client with alcohol withdrawal symptoms" and "Confusion and hallucination are commonly observed to identify delirium tremens" where the effectiveness was also more or less similar (40.5% and 42.2% respectively). However, It reveals that SIM was effective for the both the item.

Table No. 4.3.8: Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding management of suicide.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
The immediate management of poison is detoxification.	44.4	91.1	46.7
Gastric lavage and induce emesis are the methods of detoxification.	57.7	84.4	26.7
Pesticides & diazepam over dose are detoxified with activated charcoal to detoxify.	31.1	71.1	40.0
The immediate management for patient with fall is to support the fractured area.	48.8	80.0	31.2
Endotracheal intubation is to be performed for breathing distress of the client with hanging.	35.5	73.3	35.6
Careful administration of I.V fluids will help to control the increased intra cranial tension in hanging client.	37.7	71.1	34.1
Clozapine and lithium are the drugs given	37.7	66.6	28.9

to control the suicidal ideas.			
Regular monitoring of vitals of the client with suicidal attempt to know the improvement.	40.3	75.5	35.2

Item wise comparison of pre and post test KS the staff nurses regarding management of suicide shows that during post test all most all (91.1%) responded correctly for the item, "The immediate management of poison is detoxification" and the effectiveness also highest (46.7%). It might be due to easy understanding of the item whereas, the lowest post test knowledge response (66.6%) was for the item, "Clozapine and lithium are the drugs given to control the suicidal ideas" where the effectiveness was 28.9% which might be due to difficulty in understanding the item. However the lowest effectiveness was (26.7%) for the item "Gastric lavage and induce emesis are the methods of detoxification" it might be due to highest pretest score (57.7%). Over all the effectiveness varies from 31.2% to 40% for the other items reveals that the self instructional module was effective for the area management of suicide (Table No. 4.3.7).

Table No. 4.3.9: Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding management of violence.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Talking softly and supporting to calm-down the client will be the immediate measure to control violence.	37.7	80.0	42.3
Prolonged eye contact to be avoided with violent client.	49	77.1	28.3

Administering Inj. Haloperidol and Lorazepam will control the violent behavior.	48.8	77	28.3
Physical and chemical restraints are used for patient with violence.	46.6	71.1	24.5
"Physical restraints are used when the behavior not controllable".	35.5	84.4	48.9
Physical restraints should be done by isolating the limbs with padded restraints.	46.6	84.4	37.8
Physical restrains should be released one by one for every 15 mints.	42.2	86.6	44.4
Medication use to restraint freedom of movement is called chemical restraints.	44.4	82.2	37.8
When the client failed to calm down with physical restraints the chemical restraints are used.	42.2	66.6	35.6
Strangulation and skin laceration risk factors with physical restraints.	37.7	84.4	46.7

Item wise comparison of pre and post test KS the staff nurses regarding management of violence shows that during post test most of (86.6%) them responded correctly for the item "Physical restrains should be released one by one for every 15 mints" and the effectiveness was 44.4% whereas, the highest effectiveness (48.9%) was for the item, "physical restraints are used when the behaviour not controllable" which might be due to the lowest pre test response (35.5%). Whereas, the lowest post test response (66.6%) was obtained for the item "When the client failed to calm down with physical restraints the chemical restraints are used" the effectiveness was 35.6%. However, the lowest effectiveness (24.5%) was obtained for the item "Physical and chemical restraints are used for patient with violence" and it might be due to difficulty in understanding the items. Further, more or less similar response (77.1% each) were obtained for the items "Administering Inj. Haloperidol and Lorazepam will control the violent behaviour" and "prolonged eye contact to be avoided with violent client" the effectiveness were also similar (28.3% each) it might be due to highest pre test response 48.9%. However the effectiveness varies from 37.8% to 42.3% for the other area, overall score reveals the effectiveness SIM in the area of management of violence.

Table No. 4.3.10   : Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding management of Aggression.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Maintaining calm and consistent approach will be the immediate measure.	37.7	86.6	48.9
Seclusion & chemical restraints are control methods.	46.6	71.1	24.5
The purpose of seclusion is to isolate the client in a room to reduce sensory stimuli.	40.3	75.5	34.7
Nutrition and elimination are the basic needs for restrained client.	44.4	91.1	46.7

Item wise comparison of pre and post test KSs of staff nurses regarding Management of Aggression during post test all most all (91.1%) responded correctly for the item "Nutrition and elimination are the basic needs for restrained client" and the effectiveness was 46.7%. However, the highest effectiveness (48.9%) was obtained for the item "Maintaining calm and consistent approach will be the immediate measure client with aggression" it might be due to lowest pretest response (37.7%). Further, lowest post test response (71.1%) was obtained for the item, "Seclusion & chemical restraints are the methods to control the client with aggression" and also it shows the lowest effectiveness (24.5%). It might be due to highest pretest response (46.6%). However, the effectiveness varies from 34.7% and 46.7% in the other items. Hence, the variation in the effectiveness reveals the effectiveness of SIM.

Table No. 4.3.11: Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding management of iatrogenic emergencies

Item	Pretest correct	Post test	Effectiveness

	respon ses (X) %	correc t respo nses (Y) %	of SIM E = (Y-X) %
The immediate management in iatrogenic emergency is to with hold the medications.	33.3	88.8	55.5
Administering anti cholinergic drug will control extrapyramidal syndrome.	37.7	77.0	39.3
Tab.Trihexyphenidyl 2mg to 4 mg are used for the treatment of pseudo parkinsonism.	46.6	66.6	20.0
Small frequent semi solid diet will reduce the difficult mastication movement.	35.5	80.0	44.5
Gentle passive excise will prevent muscle contraction of client with dystonia.	42.2	64.4	22.2
Vitamin E and Tetrabenzine to be administered for tardive dyskinesia.	28.0	75.5	47.5
Frequent sips of water and maintenance of temperature to be done to client with neuroleptic malignant syndrome.	35.5	64.4	28.9
Slowly rising from the bed will help to manage orthostatic hypotension in patient on antipsychotics.	48.8	91.1	42.3
Hemodialysis is done to reduce the client with lithium toxicity.	42.2	77.7	35.5
Providing sugarless candy and sips of water will prevent dry mouth due to lithium toxicity.	40.0	80.0	40.0

Item wise comparison of pre and post test KSs of staff nurses regarding "Management of Aggression" Shows that during the post test almost all (91.1%) of them responded correctly for the item "Slowly rising from the bed will help to manage orthostatic hypotension in patient on antipsychotics" and effectiveness was 42.3%. whereas, the highest effectiveness (55.5%) was obtained for the item, "The immediate management in iatrogenic emergency is to with hold the medications" it might be due to easy understanding of the item .Further, the lowest post test correct response (64.4% each) were more or less similar for the items "Gentle passive excise will prevent muscle contraction of client with dystonia "and frequent sips of

water and maintenance of temperature to be done to client with neuroleptic malignant syndrome and the effectiveness were 22.2% and 28.9% respectively it might be due to low pretest response. However, the effectiveness varies from 28% to 47.5% for the other items it reveals the effectiveness of SIM for the area "Management of Iatrogenic emergencies".

Table No. 4.3.12: Item wise comparison of pretest and post test correct knowledge responses (in %) of staff nurses regarding Management of Substance withdrawal syndrome.

Item	Pretest correct responses (X) %	Post test correct responses (Y) %	Effectiveness of SIM E = (Y-X) %
Turning the head one side to prevent aspiration will be the Immediate management.	42.2s	73.3	31.1
Administer 50% dextrose to treat the symptoms of hypoglycemia	46.6	88.8	42.2
Vitamin B-1 Is administered to prevent Korsakoff syndrome	42.2	75.5	31.3
Benzodiazepine are given for the alcohol withdrawal symptoms.	44.4	68.8	24.4
Desipramine and Cloninidine administered in case of opoid and cocaine withdrawal symptoms.	51.1	82.2	31.1
Reduce external stimuli to prevent the risk of seizure attack.	44.4	91.1	46.7
Calm and quite environment should be provided to control the external stimuli.	51.1	95.5	44.4

Item wise comparison of pre and post test KSs of staff nurses shows that regarding "Management of Substance withdrawal syndrome" shows that out of seven items during the post test all most all (95.5%) responded correctly for the item "Calm and quite environment should be provided to control the external stimuli" and

effectiveness was 44.4%, whereas ,highest effectiveness was 46.7% for the item "Reduce external stimuli to prevent the risk of seizure attack" it might be due to easy understanding of the item. Further ,more or less similar post test response 73.3% and 75.5% were obtained for the items" Turning the head one side to prevent aspiration will be the Immediate management" and Vitamin B-1 Is administered to prevent Korsakoff syndrome and the highest effectiveness were also more or less similar (31.1 and 31.3 respectively). However, the effectiveness varies from 42.2% to 44.4% for the other items. This revealed the effectiveness of SIM (Table.No.4.3).

Section 4

Comparison of the effectiveness of SIM with demographic variables of the Staff nurse knowledge regarding psychiatric emergencies.

To assess the effectiveness of the SIM, mean SD and mean percentage of pre and post test scores were compared. The findings are presented below.

Table No. 4.4.1 – Comparison of the mean, SD and mean percentage of pretest and post test KS according to the age of the staff nurses.

Age (in years)	No. of staff nurses	Pretest			Post test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
21-30	23	27.86	3.84	42.87	50.43	3.61	77.59	27.1
31 -40	12	28.50	4.18	43.80	50.16	2.66	77.17	27.1
41-50	7	28.70	6.21	44.17	52.51	2.00	80.87	36.7
51 and above	3	26.33	1.53	40.5	51.33	1.58	78.97	38.4

Total	45	28	4.I2	43.1	50.7	3.41	78.1	35

Comparison of pretest and post test mean, SD and mean percentage with regard to age of the staff nurses shows that during post test, the highest mean score (52.51 ±2.00) which is 80.87% of the total score was for the staff nurses in the age group of 41-50 years with effectiveness of 36.7%. The lowest and more or less similar mean score (50.43 ± 3.61 and 50.16 ± 2.66) which are 77.59% and 77.17% obtained by staff nurses in the age group of 21-30 yrs and 31-40 also revealing the similar lowest difference in the mean percentage (27.1% each). However, the SIM was found highly effective (38.4%) for the age group of 51 and above which might be due as the age increases the level of understanding are better (Table. No. 4.4.1).

Table No. 4.4.2 – Comparison of the mean, SD and mean percentage of pretest and post test KS according to the sex of the staff nurses.

sex (in years)	No. of staff nurses	Pretest			Post test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
Female	35	28.5	9.29	43.9	51.1	3.05	78.6	35.3
Male	10	26.4	2.06	40.6	49.6	3.00	76.3	35.7
Total	**45**	**28**	**4.I2**	**43.1**	**50.7**	**3.41**	**78.1**	**35**

Comparison of pretest and posttest mean, SD and mean percentage with regard to sex of the staff nurses shows that during post test, the mean score was more or less similar for both the groups (51.1± 3.05 and 49.6.1± 3.00) which were 78.6% and 76.3% respectively and the difference in mean percentage also were

more or less similar (35.3% and 35.7% respectively). It reveals that SIM was effective for the both irrespectively.

Table No. 4.4.3 – Comparison of the mean, SD and mean percentage of pretest and post test KS of according to the religion of the staff nurses.

Religion	staff nurses	Pretest			Post test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
Hindu	21	29.14	3.3	44.88	50.6	1.18	77.99	33.11
Muslim	7	28.42	3.65	43.73	49.4	2.82	76.04	32.67
Christians	17	26.75	3.26	41.15	54.6	2.81	84	42.85
Total	**45**	**28.0**	**4.l2**	**43.1**	**50.7**	**3.41**	**78.1**	**35.0**

Comparison of pretest and post test mean, SD and mean percentage with regard to religion of staff nurses shows that during post test highest mean score (41.15±) which is 84 % was obtained by nurses who were Christians and the effectiveness was (42.85%). The lowest mean score (49.4±2, 82 ±50.6 1.18) which are 76.04% and 77.99 was obtained by in Muslim and Hindu nurses with similar lowest effectiveness (32.67 and 33.11 respectively) .This revels that SIM was more or less effective for the all the nurses irrespectively.

Table No. 4.4.4 – Comparison of the mean, SD and mean percentage of pretest and post test KS of according to the educational status of the staff nurses.

Educational status	No. of staff nurses	Pretest			Post test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
GNM	28	27.46	3.32	42.25	50.53	3.02	77.7	35.45
BSc(N)	17	29.5	5.26	44.70	51.11	8.62	78.6	33.9
Total	45	28	4.I2	43.1	50.7	3.41	78.1	35

Comparison of pretest and post test mean, SD and mean percentage with regard to educational status shows that during post test, more or less similar mean score (51.1 ±8.62, 50.53±3.02) which are 78.6% and 77.7% of the total score were obtained by the nurses who completed BSc (N) and GNM with more or less similar effectiveness (33.9% and 35.45% respectively). This reveals that the SIM was similarly effective for both nurses irrespective of their educational status.

Table No. 4.4.5 – Comparison of the mean, SD and mean percentage of pretest and post test KS of according to the years of experience of the staff nurses.

Years of experience	No 0f staff nurses	Pretest			Post test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
1-10yrs	28	28.8	4.21	43.51	50.53	3.50	77.7	34.6

11-20yrs	7	27.2	2.43	41.97	49.28	3.91	75.8	33.8
21-25yrs	7	28.7	6.21	44.17	52.57	2	80.9	36.7
26yrs	3	26.3	1.58	43.58	52.00	1	80.	36.4
Total	**45**	**28.0**	**4.I2**	**43.1**	**50.7**	**3.41**	**78.1**	**35.0**

Comparison of pretest and post test mean, SD and mean percentage of staff nurses with regard to years of experience shows that during post test, the highest mean score (52.57±2) which is 80.9% was obtained by nurses who had 21-25 yrs and with highest effectiveness 36.7%. More or less similar mean scores (50.53±3.50 and 49.28±3.91) which are 77.7% and 75.8% obtained by staff nurses who had 1-10 yrs and 11-20 yrs of experience and the effectiveness was also more or less similar (34.6% and 33.8% respectively).

Hence it no interpreted can be made as there is no definite pattern related to the years of experience and knowledge. It reveals that nurses who had 26 and above years had better effectiveness, where the sample size was less than 10% of the total sample. Considering all other group the Self Instructional Module was found effective for the staff nurses had 21-25yrs of experience (Table No. 4.4.5).

Table No. 4.4.6 –Comparison of the mean, SD and mean percentage of pretest and post test KS of according to the area of working of the staff nurses.

Area of working	No. of staff nurses.	Pretest			Post test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
Causality	3	28.33	2.51	43.58	52.66	1.16	81.02	37.44
OPD	5	27.60	2.96	42.46	51.2	1.64	78.76	36.30
Male ward	19	26.51	3.73	40.89	50.10	3.33	77.08	36.19
Female ward	18	29.72	4.71	45.72	45.11	3.29	69.40	23.68
Total	**45**	**28.0**	**4.I2**	**43.1**	**50.7**	**3.41**	**78.1**	**35.0**

Comparison of pretest and post test mean, SD and mean percentage of staff nurses with regard to area of working shows that during post test, the highest mean score (52.6±1.16) which is 81.02% obtained by the staff nurses who were working in the causality and also had highest effectiveness (37.4%). The lowest mean score (45.11±3.29) which is 69.40% obtained by the nurses working in female ward with the lowest effectiveness (23.68%) it might be due to highest pretest score (45.72%). Further, more or less similar mean scores (51.2±1.64 and 50.1±3.33) which are 78.76% and 77.08% obtained by the staff nurses working in OPD and male ward and with more or less similar effectiveness (36.30% and 36.19% respectively). However the effectiveness found highest for the Causality nurses it might be because the sample size was less than 10% of the total sample.

Table No. 4.4.7 – Comparison of the mean, SD and mean percentage of pretest and post test KS according to their previous sources of information.

Attended in service programme	No. of staff nurses	Pretest			Post-test			Difference in mean%
		Mean	SD	Mean %	Mean	SD	Mean %	
Yes	12	28.91	3.91	44.48	51.58	2.74	79.35	34.87
No	33	27.75	4.29	42.70	50.45	3.21	77.62	34.92
Total	**45**	**28.0**	**4.I2**	**43.1**	**50.7**	**3.41**	**78.1**	**35.0**

Comparison of pretest and post test mean, SD and mean percentage with regard previous sources of information of the staff nurses shows that during

post test, the mean score was more or less similar for both the groups (51.5± 2.74 and 50.45± 3.21) which were 79.35% and 76.62% respectively and the difference in mean percentage were also more or less similar (34.87% and 34.92% respectively). It reveals that SIM was effective for the both irrespectively.

Section 5: To assess the effectiveness of SIM on knowledge of staff nurse regarding management of psychiatric emergencies. Hypothesis testing was done by using paired 't' test and chi-square test.

Testing of Hypotheses

H_{01}: There is no significant difference between the pre and post-test KS of staff nurse regarding management of psychiatric emergencies.

H_{02}: There is no association between the post-test KS of staff nurse regarding

H_{01}: There is no significant difference between the pre and post-test KSs of the staff nurse regarding management of psychiatric emergencies

Table No. 4.5.1 : Comparison of differences of pre-test and post-test KSs of the staff nurse regarding management of psychiatric emergencies.

S. No	Area	Subarea	't' value	Level of Significance
A.	Assessment	Meaning	5.5	Highly significant
		Suicide	7.23	Highly significant
		Violence	7.15	Highly significant
		Aggression.	7.98	Highly significant
		Iatrogenic Emergencies	21.8	Highly significant
		Substance with drawl	7.51	Highly significant
B.	Management			
		Suicide	12.81	Highly significant
		Violence	15.9	Highly significant
		Aggression.	12.09	Highly significant
		Iatrogenic Emergencies	19.35	Highly significant
		Substance withdrawal	13.73	Highly significant
		TOTAL	**61.07**	**Highly significant**

(df = 44, Table Value = 2, P < 0.01 Highly significant)

Paired 't' test was calculated to analyze the differences in overall and area wise pre-test and post-test KS of staff nurses regarding management of psychiatric emergencies. It shows that highly significant difference was found between the area wise score values of pre-test and post-test. Hence, the stated null hypothesis is rejected and statistical hypothesis was accepted (P<0.01). Thus the difference observed in the mean score values of pre-test and post-tests were true difference (Table No. 4.5.1).

H0₂ : There is no significant association between post-test KSs staff nurse regarding management of psychiatric emergencies**.**

Table No. 4.5.2: Association between the post-test KS and demographic variables of staff nurses.

Sl. No.	Variables	Cal. value	Level of Significance
1	Age	0.60	Not Significant
2	Sex	2.01	Not Significant
3	Religion	1.07	Not Significant
4	Educational status	0.65	Not Significant
5	Years of experience	0.29	Not Significant
6	Area of working	0.75	Not Significant
7	Previous source of information	2.01	Not Significant

(df = 1), (Table Value = 3.84), (P < 0.05,Not significant)

Chi square was calculated to find out the association between the post test KS and variables of the staff nurses. No significant association were found between KS of the staff nurses in post-test when compared with age, sex, religion,

educational status, years of experience and previous source of information which shows significant relationship (P>0.05). Hence, it can be interpreted that the difference in mean score value related to the above mentioned demographic variables were not true but only by chance and null hypotheses is accepted.

Hence it is interpreted that the Self Instructional Module was more effective for all the nurses irrespective of their demographical variables (Table No. 4.5.2).

SUMMARY:

This chapter dealt with analysis and interpretation of data collected to evaluate the effectiveness of SIM. Finding revealed that the pre-test knowledge mean score was 28.0±4.I2 which is 43.I% of the total score whereas during the post-test the total mean score was 50.7 ±3.41 which is 78.1% of the total score.

DISCUSSION, SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

A quasi experimental design was used to assess the effectiveness of Self instructional module to assess their knowledge among Staff Nurses regarding management of Psychiatric emergencies in PIMS, Aarupadai Veedu Medical college and Hospital (Cuddalore district), Sneha mind centre and Danvandari mental hospital (Trinelveli), from 20.09.09 to 5.10.09. Data were collected from the 45 nurses, selected by purposive sampling technique using closed ended questionnaire and analyzed by using descriptive and inferential statistics and presented in the form of tables and diagram in chapter IV.

Discussion:

This chapter attempts to discuss the findings of the study as per the objective. These findings are discussed under the following headings –

☒ Description of the demographic characteristic of the Nurses.

☒ Assessment of knowledge of the Nurses prior to the implementation of Self Instructional Module.

☒ Assessment of the effectiveness of Self Instructional Module on knowledge regarding management of Psychiatric Emergencies among staff nurses after implementation Self Instructional Module.

✓ Area wise comparison of mean, SD and mean percentage of pre-test and post test Knowledge Score of the nurses regarding management of psychiatric emergencies.

✓ Item wise comparison of pre and post test Knowledge Scores of the staff nurses regarding management of psychiatric emergencies.

✓ Comparison of the effectiveness of Self Instructional Module with demographic variables of the Nurses regarding management of psychiatric emergencies.

✓ Testing hypotheses.

Section 1:

Description of the demographic characteristic of the staff nurses:

Percentage wise distribution of the staff nurses according to their age depicts that height percentage (51%) of them were in the age group of 21-30 yrs and lowest percentage (7%) were in the age group of 50 and above years, (fig no. 4.1.1). It is supported by the findings of Neela P. (2006) reported in her study that (76%) majority of the staff nurses were between the age group of 21-30 yrs.

Percentage wise distribution of staff nurses according to their sex shows that the highest percentages of nurses were females (80%) when compared to males

(20%). It might be due to that mostly females are motivated for nursing as a carrier (Fig. no. 4.1.2.). It is supported by Sharma A., (2009) conducted a study on "Management of work related stress on knowledge among staff nurses" who reported that most of the participants (76.12%) were female.

The highest percentage (44%) Hindus whereas, lowest percentage (16%) of them were Muslims. However 40% of the staff nurses were Christians. It seems that most of the nurses were Hindus (Fig. 4.1.3). It is supported by the findings of Registrar general & Census Commissioner of India (2001) who reported that 80.5% of populations are Hindus in India.

Highest percentage of the staff nurses were (62%) diploma holders. Lowest percentage 38% were graduate nurses (Fig: 4.1.4). It is supported by the study conducted by Mathai M. (2000), who reported that 79.66% of nurses under study were GNM.

Percentage wise distribution of nurses according to the years of experience shows that highest (62%) of them had 1-10 yrs of experience; whereas only 7% had above 26 years of experience (Fig. No.-4.1.5). It is contradictory to the findings of Hall W.R. et al., (2007) who reported that participants under study had more than 10 yrs of experiences. It might be associated with the age group as majority of them we from younger age group.

More are less similar percentages of staff nurses worked in male ward (42%) and female ward were working in male ward (40%), whereas, lowest percentage (7%) was working in causality. However, 11% was working in OPD and ECT room (Fig. No.4.1.6). It is supported by the study conducted by Andria (2007) who stated that majority (44%) of them were working in general ward and10% were working in emergency ward.

Previous exposure of the staff nurses to in-service programme on of psychiatric emergencies reveals that majority (73%) of the staff nurses had no exposure to any in service programme, whereas, only 27% of the staff nurses had

attended in-service programme on psychiatric emergencies. It is supported by the finding of Andria (2007) who stated that majority (72%) of the staff nurses had no exposure to any in-service programme. Whereas, only 28% of the staff nurses attended the programme.

Section 2:

Assessment of knowledge of the staff nurses prior to the implementation of Self Instructional Module:

Area wise distribution of mean, SD and mean percentage of pretest knowledge score of nurses regarding management of psychiatric emergencies. It consists of Area A and B. Area A "Assessment" has 6 sub areas shows that the highest mean score (1.15±1.13) which is 57.7% of the total score was obtained in the area meaning of psychiatric emergencies Whereas, lowest mean score (0.82±0.73) was 41.1% obtained in the area of "Assessment of Substance withdrawal" reveals that nurses had average knowledge in this area. In the area of management the highest mean score (3.22±.1.09) was 46% was obtained in the area of "management of substance withdrawal". Whereas, lowest mean score (3.9±1.4) was 39.1% was obtained in the area of "management of Iatrogenic Emergencies" reveals that nurses had poor knowledge in this area.

Overall mean score was 28± 4.1which is 43.1 % the total mean score of reveals that the staff nurse understudy had average knowledge regarding Management of psychiatric emergencies" (Table No. 4.2.1). It is supported by McCann et al., (2006) who reported that result shows that most of the nurses had less knowledge and had n educational preparation to care for patients with deliberate self harm.

Section 3:

Area wise comparison of mean, SD and mean percentage of pretest and post test knowledge score of staff nurses regarding management of psychiatric emergencies:

Area wise distribution of mean, SD and mean percentage of pretest and post test knowledge scores of staff nurses regarding management of psychiatric emergencies. Areas A "Assessment of psychiatric emergencies" the highest post test mean score (1.78±1.73) which is 86.6% was obtained in the area of "Assessment of Substance with drawl" and also had highest effectiveness (45.6%) whereas, lowest mean score (5.13±1.1) which is 64.1% was obtained in the area of "Assessment of Iatrogenic emergencies" and also had lowest effectiveness which is 22.1% reveals good knowledge. In this area (B) Management of psychiatric emergencies the highest mean score response (5.75±0.88) which is 82.2% for the item "management of Substance with drawl" and the effectiveness was 36.2%. However highest effectiveness 38.8% was obtained in the area of "Management of Aggression". Whereas lowest mean score (6.13±1.24) which are 76.6% obtained in the area "Management of Suicide' and Iatrogenic Emergencies and the effectiveness was 35% reveals that nurses had good knowledge this area (Table No. 4.3.1).

Comparison of overall mean, SD & mean percentage of pretest and post test knowledge scores reveals that during post test the mean score was 50.7±3.41 which is 78.1% of the total score depicting mean difference of 35% increase in mean percentage of score revealing the effectiveness of SIM (Table No. 4.3.1). It is supported by Sally Wai –Chi Chana (2009) who reported that the nurses were more competent in managing the suicidal risk after attending the educational programme.

Line Graph:

Line graph shows that during highest score values were between 35-40 obtained by 8.89% of staff nurses. Whereas, as the lowest values were between 15-20 obtained by 2.2% staff nurses. Whereas in the post test highest score values were

between 55-60 obtained by 8.89% of staff nurses and the lowest score values were between 40-50 obtained by only 2.2% of staff nurses.

Further, the mean & median plotted for pretest was 28.04 & 27 whereas, during post test it was 50 and 51respectively revealing the difference of approximately 25 scores. Hence, it can be interpreted that the SIM was effective (Fig. No. 4.3.1).

O-give Diagram:

O-give curve showing the comparison of pretest and post test cumulative percentage of KS of staff nurses regarding management of psychiatric emergencies showing that the O-give curve values on post test score was consistently higher than the pretest scores. In the pretest 25th percentile score was 21 whereas, it was 47 for the posttest revealing a difference of 26, the 50th percentile score for pretest was 23, which was 51 for the post test revealing a difference of 28. Similarly, the 75th percentile score for pretest was 27 and 54 was for the post test revealing a difference of 29, revealing the effectiveness of SIM regarding management of psychiatric emergencies (Fig.No.4.3.2).

Item wise comparison of pre and post test knowledge scores of the staff nurses regarding management of psychiatric emergencies:

Table 5.1: Item wise comparison of pre and post test knowledge score(in %).

Area	Subareas	No of Items	Pretest		Post-test	
			<50%	>50%	<50%	>50%
A. Assessment						
	Meaning	2		2		2

Of psychiatric emergencies	Suicide	8	5	2	8
	Violence	3	2	1	3
	Aggression	3	2	1	3
	Iatrogenic emergencies	8	8		8
	substance withdrawal syndrome	2	2		2
B. Management Of psychiatric emergencies	Suicide	8	7	1	8
	Violence	10	10		10
	Aggression	4	4		4
	Iatrogenic emergencies	10	10		10
	substance withdrawal syndrome	7	5	2	7

Meaning and types of psychiatric emergencies

During pretest out of 2 item in this area scored correct response were more than 50% (55.6% and 60%) and during post test the correct response were 86.6% and 84.4% each and the effectiveness various from 23.4% to 31.1% and It reveals that SIM was effective for the both the item related to meaning and types of psychiatric emergencies (Table No. 4.3.2).

Assessment of suicide

Out of 8 items related to the Assessment of suicide correct responses were less than 50% except for the items "Suicide is deliberate self harm with fatal out comes" and "Strangulation mark on the neck & breathing difficulty are the commonly observed in the case of hanging" (53.3% each) and during post test, correct responses for all items were more than 50%. However, the effectiveness varies from 23.7% to 53.1% (Table No. 4.3.2). Findings of present study is supported by Rufus

et.al., (2001) who reported that the nurses who work in mental rehab centre had more knowledge in identifying the suicidal risk .

Assessment of Violence

For all the (3) items related Assessment of Violence the pretest correct responses were less than 50% except for the item "Anger & intention to hurt others are the general appearance of the client with violence" (55.5%) and during post test correct responses were more than 50% for all items. However, the effectiveness varies from 26.7% to 34.8% (Table No. 4.3.3). It is supported by Lavioe et al. (2003) noted that in the emergency department of major teaching hospitals, 46% of staffs noted at least one weapon per month, 43% described at least one physical attack on medical staffs per month and 7% reported act of violence resulted in death.

Assessment of Aggression

There are 3 items related to Assessment of Aggression during pretest, correct responses were less than 50% except for the items "Lack of interest in listening to be observed communicating with aggressive client (51.1%)" whereas during post test, correct responses were more than 50% for all the items. However, the effectiveness varies from 28.9% to 40% (Table No. 4.3.4). It is supported by Geoff et al. (2003) who reported that nurses working in de addiction centre faces more aggressive behavior from their patient and 56% of them reported that they are able assess behavioral sign of aggressive client.

Assessment of iatrogenic emergencies

Out of 8 items related to "Assessment of iatrogenic emergencies", during pretest correct responses were less than 50% for all the items and during post test, correct responses were more than 50% for all the items however, the effectiveness varies from 15.5% to 35.3% (Table No. 4.3.5). It is supported by Galick et al., (2007) who stated that most of the time nurses are the first person to identify adverse reactions to drug.

Assessment of Substance withdrawal syndrome

For all the items related to Assessment of Substance withdrawal syndrome, during, pretest, correct responses were less than 50% and it was more than 50% during post test for all the items. However, the effectiveness varies from 40.5% to 42.2% (Table No. 4.3.6).

Management of suicide

Out of 8 items related to management of suicide, during pretest, correct responses were less than 50% except for the item "Gastric lavage and induce emesis are the methods of detoxification" (57.7%) during post test, correct responses were more than 50%. However, the effectiveness were varies from to 26.7% to 46.7% (Table No. 4.3.7). It is supported by Brown Antony et al., (2004) who reported that the nurse work in emergency unit had significantly high knowledge regarding antidotes for various poisons.

Management of violence

Out of 10 Items related to management of violence during pretest correct responses were less than 50% for all the items during post test, all the items correct responses were more than 50%. However, the effectiveness were varies from 24.5% to 48.9% (Table No. 4.3.8). It is supported by Lavioe et al., (2003) reported that 53% of emergency department nurses were more confident to manage the violence.

Management of Aggression

All the items related to management of Aggression, during pretest, correct responses were less than 50% whereas, during post test, correct responses were more than 50%. However, the effectiveness were varies from 24.5% to 48.9% (Table No. 4.3.9). It is supported by Needham (2005) who reported that use of manual restraint involves taking the patient down to the floor in a controlled manner, this control and restraint method been felt by the staff nurses safer and confident in dealing with aggressive situations.

Management of iatrogenic emergencies

Out of 11 items related to management of iatrogenic emergencies, during pretest, correct responses were less than 50% for all the items whereas, during post test, correct responses were more than 50% for all the items. However, the effectiveness were varies from 20% to 55.5% (Table No. 4.3.10).

Management of Substance withdrawal syndrome

The items related to management of Substance withdrawal syndrome during pretest, correct responses were less than 50% except for the items "Desipramine and Clonidine administered for opoid and cocaine withdrawal symptoms" and "Provide calm and quite environment measures to be taken to control the external stimuli" it was 51.1% respectively post test, correct responses were more than 50% for all the items. However, the effectiveness were varies from 24.4% to 46.7% (Table No. 4.3.11). It is supported by Fernando Christy (2000) who reported that nurses were more skill in managing the withdrawal symptoms especially when clients come with alcohol dependent syndrome.

Section 4:

Comparison of the effectiveness of SIM with demographic variables of the Staff nurse knowledge regarding psychiatric emergencies:

Mean, SD and mean percentage with regard to age group of the staff nurses shows that during post test highest mean score (52.51 ±2.00) which is 80.87% was obtained by the staff nurses in the age group of 41-50 years and the effectiveness was 36.7%. The lowest and more or less similar mean score (50.43 ± 3.61 and 50.16 ± 2.66) were for staff nurses in the age group of 21-30 yrs and 31-40 which are 77.59% and 77.17% of the total score with similar effectiveness of 27.1%. However, the SIM was found more effective (38.4%) for the age group of 51 and above (Table. No.4.4.1). It is supported by Nancy et al., (2002) stated that younger less experience, less formally trained health workers and nurses are at higher risk of assault due to inadequate practical knowledge.

During the post test mean, SD and mean percentage with regard to sex of the staff nurses shows that the mean scores (51.1± 3.05 and 49.6.1± 3.00) were more or less similar effective for both the groups. Which were 78.59% and 76.30% respectively and the difference in mean percentage were also more or less similar (35.3% and 35.7% respectively). It reveals that SIM was effective more or less similarly effective for both the groups (Table. No.4.4.1).

The highest mean score (54.6±2.81) which is 84% of the total was obtained by nurses who were Christians and the effectiveness was 42.85%. The lowest mean score (49.4±2, 82 ±50.6 1.18) which are 76.04% and 77.99 was obtained by in Muslim and Hindu nurses with similar lowest effectiveness (32.67 and 33.11 respectively). This reveals that Self instructional module was more effective for Christians when comparing to the other religion (Table No.4.4.3).

During post test more or less similar mean score (51.1 ±8.62 and 50.53±3.02) which is 78.6% and 77.7% were obtained by the nurses who are completed BSc (N) and GNM with more or less similar effectiveness (33.9% and 35.45 respectively). This reveals that the SIM was similarly effective for both the group irrespective of their educational status (Table. No. 4.4.4). It is supported by John M Aflague (2004), conducted a study on suicide assessment by psychiatric mental health nurses findings reveals knowledge about their actual nursing practice irrespective of their educational status.

The highest post test mean score (52.57±2) which is 80.87% was obtained by nurses who had 21-25 yrs experience with highest effectiveness (36.7%) whereas, lowest mean score were more or less similar (50.53±3.50 and 49.28±3.21) which are 77.7% and 75.8% obtained by staff nurses who had 1-10yrs and 11-20yrs of experience and the effectiveness was also more or less similar (34.6% and 33.8% respectively). Hence there is no interpretation can be made because there is n definite pattern related to the knowledge and the years of experience (Table No. 4.4.5). It is supported by McCann et al., (2006) observed in his study regarding

management of suicide reveals that older and more experienced nurses had more supportive attitudes than younger and less experienced nurses.

The highest post test mean score (52.6±1.16) which is 81.02% was obtained by the staff nurses who were working in the causality and the effectiveness was also highest (37.4%) whereas the lowest mean score (45.11±3.29) which is 69.40% obtained by the nurses working in female ward with lowest effectiveness (23.68%). It might be due to highest pretest score (45.72%). It reveals that SIM was more effective for nurses working in the causality (Table. No.4.4.6). It is supported by Brown Antony et al., (2004) who reported that the nurse work in emergency unit had significantly high knowledge regarding antidotes for various poisons.

During post test more or less similar mean score (51.5 ±2.74 and 50.45±3.02) which is 79.3% and 77.6% were obtained by the nurses who had attended in-service programme and who had not attended in-service programme on psychiatric emergency management with more or less similar effectiveness (34.8% and 34.92 respectively). It reveals that there no relationship between effectiveness of SIM and previous source of knowledge (Table. No.4.4.7). Wai Chi-Chana (2006) conducted a study to evaluate an education programme on suicide prevention for nurses .They showed significant improvement in their knowledge and skills.

Section 5:

Testing Hypotheses

Highly significant difference between the area wise score values of pretest, post test and overall score. Hence, the stated null hypothesis is rejected and statistical hypothesis was accepted (P<0.01) indicating the effectiveness of Self instructional module. It is supported by McCann et al., (2006) observed in his study regarding management of suicide reveals that nurses had more knowledge.

No significant association was found between knowledge scores of the staff nurses in post test when compared with age, sex, religion, areas of working and years of experiences, educational status and previous source of information, which shows significant relationship (P>0.05). It is contradictory to the study

conducted by Hussan A., (2005) who observed in his study that significant association was found between the knowledge scores when compared to the demographic data (Table. No.4.5.2).

Summary:

A quasi experimental design was used to assess the effectiveness of Self Instructional module regarding Management of Psychiatric Emergencies on knowledge among staff nurses working in psychiatry ward the data collected from 20.09.09 to 07.10.09.

The findings are summarized as follows -

☒ Majority (51%) of the staff nurses were in the age group of 21-30 yrs.

☒ Most of the staff nurses were females (80%) when compared to males (20%).

☒ Majority (44%) of the staff nurses were Hindus.

☒ Similar percentages (62%) of the staff the nurses had diploma course and had 1 to 10 years of experiences.

☒ More are less similar percentages of them worked in male ward (42%) and female ward (40%).

☒ Overall pre test mean KS was 28± 4.1 which is 43.1 % reveals that the staff nurse understudy had average knowledge on Management of psychiatric emergencies.

➢ The total mean KS staff nurses during post test the mean score was 50.7±3.41 which was 78.1% of the total score depicting difference of 35% had good knowledge increase in mean percentage of score revealing the effectiveness of SIM.

➢ Area wise post-test mean score were above 64% of the total score in all the areas revealed good knowledge.

➢ Line graph shows during pre and post-test highest mean score 9% was between 35– 4O and 55-60.

➢ O- give curve shows that the 25th, 50th and 75th percentile values were higher than the pretest values.

Comparison of post test knowledge score related the effectiveness of SIM with demographic variables shows that

☒ Highest mean percentage for the staff nurses in the age group of 41 – 50 years and highest effectiveness of SIM was found in the age group of 41-50 years (38.4%).

☒ Effectiveness of SIM was almost similar for the both the male (35.0%) and female (35.7%) Staff nurses.

☒ Highest effectiveness of SIM was found for Christians (42.85%).

☒ Almost similar effectiveness of SIM was for GNM (35.45%) and BSc (N) (33.9%).

☒ Effectiveness of SIM was highest (36.7%) for the staff nurses who had 21-25 years of experience and (37.44%) for staff nurses who were working in the causality.

☒ Effectiveness of SIM was almost similar for the both the nurses who have attended (34.87%) and who have not attended in-service progrmme (34.92%).

⊠   Highly significant difference was found between the area wise score values of pretest and post test and overall score.

⊠   There was no significant association between knowledge scores of the staff nurses in post test when compared with age, sex, religion, years of experiences, educational status, areas of working and previous source of knowledge.

Conclusion:

From the findings, it can be concluded that highest percentage (51%) of them were in the age group of 21-30 years, Female nurses were (80%) and (44%) were Hindus and highest percentage (62%) had diploma course, majority (62%) of staff nurses had 1-10 years of experience, 42.1% for staff nurses were working in male ward and only 26% had attended in service programme.

Prior to implementation of self instructional module to the staff nurses had poor knowledge whereas, after implementation of self instructional module to the staff nurses had good knowledge with the difference of 35% increase in the KS revealing the effectiveness of self instructional module.

Highly significant difference found between the pretest and post test KS (P<0.01) and no significant association was found between the post test KS when compared with the demographic variables of staff nurses (P>0.05).

Implications:

Nursing Service:

- The content of Self Instructional Module will help the nursing professionals in hospital and community to reinforcing their knowledge on management of psychiatric emergencies.

- The findings of the study will help to plan the teaching programme.

- These findings will help the nursing personnel's to plan the nurse to keep ready the article needed to manage psychiatric emergencies in advance.

Nursing Education:

- The nurse educators can use the Self Instructional module to teach the nurses regarding management of psychiatric emergencies.

- The nurse educators can use the Self Instructional Module to educate the student nurse regarding management of psychiatric emergencies.

- The nurse's educator can use Self Instructional Module regarding assessment of psychiatric emergencies.

- Nursing staffs can utilize the findings to educate family members on the area they have inadequate knowledge.

➢ The findings will help the nursing faculty to give more importance for planning and organizing the Self Instructional Module to improve the knowledge management of psychiatric emergencies.

<u>Nursing research:</u>

This finding of the study can be utilized to conduct -

➢ Further research on varies aspects of psychiatric emergencies effectiveness of self instructional module.

➢ A comparative study can be done to assess the effectiveness of self instructional module on community and in hospital set up.

➢ The items on various areas, which have less effectiveness can be modified and retested to find out the effectiveness.

Recommendations:

Based on the findings the following recommendations have been made for further study.

☒ Similar study can be undertaken for large samples to generalize the findings.

☒ Same study can be undertaken with control group.

☒ A video assisted teaching module can be prepared and tested for its effectiveness.

☒ Similar study can be undertaken to find out the knowledge and practice regarding management of psychiatric emergencies.

☒ A comparative study can be conducted on knowledge and skill of nurse in government and in private hospitals.

☒ Similar study can be conducted among other nurses working in general hospitals.

☒ Studies can be conducted in the type of psychiatric emergencies.

☒ Similar study can be conducted among other nurses working in the community set up.

Summary:

This chapter has dealt with the summary of the study, major findings, and conclusions, implications of the study in nursing field, education and recommendation for future.

BIBLIOGRAPHY

Ahuja N., (2005), "Short text book of psychiatry", J P Brothers publication, New Delhi Pp. 204-205.

Allen H. Michael., (2001), "Level 1 psychiatric emergency service", The psychiatric clinic of North America, Dec, Vol.22, No.4. Issue.99, Pp. 714.

Arulmani R, Rajendran S D and Suresh B., (2006), "Adverse drug reaction monitoring in a secondary care hospital in South India", British Journal of Clinical Pharmacology, Jun, Vol. 36, No:-8, Pp.16-19.

Aschenbrenners S. Diane., (2008), "The FDA approves two new drugs", Journal of Psychiatry, Dec, Vol. 108, No. 12, Pp. 16-18.

Bengtsson Anita and Carlen Bontus., (2001), <u>Internal Journal of Mental Health Nursing</u>, Aug, Vol. 16, No. 4, Pp. 256-264.

Bhalla A, Dutta S,and Chakrabarti A., (2006), "A profile of substance abusers using the emergency services in a tertiary care hospital in Sikkim", <u>Indian Journal of Psychiatry</u>, Nov, Vol.30, No.48, Pp. 243-7.

Bhatia., (2006), "Essentials of Psychiatry" (5th ed.) GBS publishers, New Delhi Pp. 26.1-26.20.

Bowers Len., (2008), "Relationship between service ecology, special observation and self harm during acute in patient", British <u>Journal of Psychiatry</u>, Vol. 193, Pp. 395-401.

Boyd Ann Mary., (2005), "Psychiatric nursing contemporary practice", Lippincott, New York, Pp. 1104-111.

Brown Antony et al., (2004), "Suicidal risk" <u>Journal of Medical Research</u>, Nov., Issue 18, Pp. 39.

Bucklecy A.M. et al., (2004), "Interventions for the treatment of organophosphorus pesticide Poisoning" , <u>Journal of Medical Research</u>, Oct., Issue 18, Pp. 391.

Busch A.B. and Shore M.F. et al. (2003), "Seclusion and restraints", <u>Harvard Rev Psychiatry</u>, No. 8, Pp. 261-270.

Chandra Sharma Mukesh (2008), <u>Nightinggale nursing times;</u>   Jun, No.8, Vol.4, Issue. 3, Pp. 15-19.

Cherian A.M., (2005), "Effectivenes of pralidoxime in treatment of OP poisoning" <u>Indian journal of medicine,</u> Jun, Vol. 2, No. 42, Pp.13-16.

Douglas G. Jacobs and Chair, (2003), "Assessment And Treatment Of Patients With Suicidal Behaviours", <u>American Psychiatry association,</u> Nov, Vol.16, Pp. 563–564.

Finebergn, Jamesd & Shaha., (2004), "Nurses and violence in a psychiatric ward' <u>Lancet</u>, Pp. 474.

Geoff et al., (2003), "In patient management of aggression", <u>British Journal of Psychiatry</u>, Vol.193, Pp. 395-401.

Goransson E. Katarina., (2007), "Thinking strategies used by registered nurses during emergency department triage", Journal complication, Aug., Vol.17, No.163, Pp-172.

Hicks Maclalyn et al., (2007), "Concept analysis of self-mutilation". Journal of complication, Oct, Vol.12, No.7, Pp. 408-413.

Hillard et al., (2004), "Suicide in a psychiatric emergency room", Am J Psychiatry, Vol.140, Pp. 459–462.

Ilang-Ilang et al., (2004), "Heaven's Antidote to Pesticide Poisoning", Network for sustainable agriculture, Bangkok, Thailand.

Iqbal M.M., Sobhan T and Ryals T., (2002), "Effects of commonly used benzodiazepines on the fetus, the neonate, and the nursing infant". Psychiatric Services, Jan, Vol.53, No.12, Pp. 39–49.

John (2007), "Self help organization for alcohol and drug problems Toward evidence –based practice and policy", Journal of Substance abuse treatment, Vol.26 , Pp. 61-69.

Kavaler Florence et al., (2003), "Risk management in health come institution", 2nd ed, Davis publication, Philadelphia, Pp180-182.

Kothari C.R., 2007, "Research methodology – methods and techniques", 2nd ed., New age publishers, Chennai, Pp 10-20.

Kuruvilla A & Kuruvilla K.,(2007), "Incidence of adverse reactions to commonly prescribed psychopharmacological agents during early phase of therapy", Indian Journal of Psychiatry , July, Vol. 37,No.3, Pp. 113-8.

Kufur.J.Daid etal.,(2008)"Psychiatric emergencies" Oxford American Handbook of Psychiatry, 1st Edition, Pp.1088-1092.

Lalitha., (2007), "Mental Health and Psychiatric Nursing" 1st ed., VMG Book house, Bangalore, 573-57 6.

Linnoila, Markku., (2009), "Alcohol withdrawal syndrome and sympathetic nervous system function - Biological Research at National Institute of Alcohol Abuse and Alcoholism". Pp. 4-23.

Manoranjitham, R. Jayakaran and Jacob KS. (2006), Indian Journal of Psychiatry Vol 48, Issue 1, Pp-72.

McCann et al., (2006), <u>Accident and emergency Nursing.</u> Jan, Vol.14, No.1, Pp 4-10.

Michael E Lekawa (2008), "<u>Delirium Tremens eMedicine Critical Care</u>", emedicine,medscape.com Maclalyn Hicks et al., (2007), "Concept analysis of self-mutilation" ,<u>Journal complication</u>, Oct, Pp. 408-413.

Mattoo et al., (2009), <u>Psychiatry and Clinical Neurosciences</u>, Aug, Vol.63,No.4, Pp. 580-582 .

Miller D. Del et al., (2008), "Extra pyramidal side effects of antipsychotics in a randomized trial", <u>British Journal of Psychiatry</u>, Vol.193, Pp. 279-288.

<u>National Crime Records Bureau (NCRB)</u> report for the year 2006.
Needham. (2005), "Non somatic effects of patient aggression on nurses", <u>Journal of advanced nursing,</u> Vol.49, No.3,Pp. 283-296.

Neeraja K.P., (2008), "Essentials of mental health and psychiatric nursing", Jaypee brothers pub, Delhi, vol. 2, Pp. 318-319.

Ngowi.A.V.etal., (2001), "Assessment and prevention of adverse health effect of pesticides in agricultural in Tanzania", <u>Journal of Occupatioal Medical Environment,</u> Vol.4, Pp. 349-356.

Peter Lehmann et al., (2002), "<u>Coming off Psychiatric Drugs</u>", <u>Peter Lehmann Publishing</u>, Germany, Pp. 43-72.
Polit D.F. & Beck C.T. (2006), "Nursing Research Principles & Methods" 7th edition, Published by Wolters Kluwer Health (India) Pvt. Ltd. New Delhi, India, Pp. – 49, 730-731, 735.

Potter and Perry, (2007), "Basic Nursing", Essentials for practice, Mosby Elsevier, St Luis Missouri, Pp. 340-343.

Potter M., (2007), "Setting the Standards Human Rights and Health", Mental HealthNorthern Ireland Human Rights Commission, May 31.

Ramadan M. I., (2007), "Managing Psychiatric Emergencies" <u>The Internet Journal of Emergency Medicine</u> , Vol.4 ,No.1.

Richard C., (2007), Alcohol and Substance Abuse Evaluation, eMedicine , Nov, Pp 1-15.

Rufus et al., (2005), "Rehabilitation" Journal of Occupatioal Medical Environment, Vol.9, Pp.133-36.

yes	platform+medline	author	author		

Sally Wai-chi Chana, Wai-tong Chienb,and Steve Tsoc (2009), "Evaluating nurses' knowledge, attitude and competency after an education programme on suicide prevention", Nurse Education today, Oct., Vol. 29, Issue. 7, Pp. 763-769.

Slee Nadja et al., (2008), "Cognitive behavioural intervention for self harm randomized controlled trial", British Journal of Psychiatry, Oct, No. 192, Pp. 202-211.

Shiv Gautam and Avasthi Ajit (2005), "Substance Abuse Disorders", An Indian Psychiatric Society Publication, Mar, Vol. 13, No. 8, Pp. 34-38.

Suominen Kirsi et al., (2004), "Completed Suicide After a Suicide Attempt:"

Terry Rustin (2008), "Substance Abuse", Emergency Psychiatry, Lippincott Williams Wilkins, Philadelphia, Pp. 233-243.

Ulrich W Preuss (2003), "Predictors and Correlates of Suicide Attempts over 5 Years in 1,237 Alcohol-Dependent Men and Women'' American Journal of Psychiatry vol. 160 Pp 56–63.

Wai-Tong Chien and Isabella YM Lee., (2007), International Journal of Multiple Research Approaches, Oct, Vol. 1, Issue.1, Pp. 52-71.

William.S.Gossman.,(2007),"DeliriumTremens Emergency Medicine", emedicine, Medscape.com.

World Health Organization (WHO)., "Guide to drug abuse epidemiology", Department of Mental Health and Substance Dependence, Geneva, Switzerland.