

# A Study to Assess the Effectiveness of Planned Teaching Programme Regarding Attention Deficit Hyperactivity Disorders among School Teachers of Selected Primary Schools in Mohali, (Punjab)

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## BACKGROUND OF THE STUDY

### Introduction:

*“Children are living beings - more living than grown-up people who have built shells of habit around themselves. Therefore it is absolutely necessary for their mental health and development that they should not have mere schools for their lessons but”*

- Rabindranath Tagore (1861-1941)

To learn and to live is inevitable in the world. Any organism as it grows and matures develop many skills. Some are life skills, which are essential for human being to lead a happy and meaningful life. There are some skills, which we develop in order to perform our job well. The olden day's disciple had given higher places to their Guru because of their immense knowledge and skill. The teacher's contrivances for teaching a disciple are reading, writing, listening, questioning extra which helps them to excel in academic<sup>1</sup>.

Attention deficit hyperactivity disorder was first described by Dr. Hoffman in 1845. A physician who wrote books on medicine and psychiatry.<sup>3</sup> Attention deficit hyperactivity disorder has been recognized in some form for at least a century, particularly in children and adolescent. The first well documented clinical description was in a series of 20 paediatric patients reported by physician George Still in London in 1902.<sup>4</sup> In united states, Attention deficit hyperactivity disorder affects from three to seven percent of the population. However, Attention deficit hyperactivity disorders exist throughout the world. Children with attention deficit hyperactivity disorder

have been identified in every country in which this condition has been studied.<sup>2</sup>

Attention deficit hyperactivity disorder (ADHD) is a common childhood disorder characterized by inattention, hyperactivity, impulsivity, and cognitive, behavioural, and emotional deficits. ADHD is also closely related to learning disabilities, lack of self-control, and social skill deficits. Approximately half of ADHD children show overt symptoms by the time they are 5 years old, and most begin to display behavioural problems during the early school years when they have to follow instructions from teachers and obey school rules. Attention deficit hyperactive disorder may become a common learning disability. If this is so teachers may resort to punishing and bullying pupils with traces of ADHD without necessarily understanding the problems many of the pupils may be going through in the process of learning. In the school system no provisions have been made regarding these attention deficit/hyperactivity disorder pupils who may exhibit behaviour contrary to the expectation in a learning environment.<sup>3</sup>

Six days- a- week children spend most of their time in classroom and other school settings. The work of the teacher becomes much more demanding when some learners have attention deficit hyperactivity disorder. When a child exhibits behaviours associated with attention deficit hyperactivity disorder, consequences may include difficulties with academics and with forming relationship with peers and teachers.

Approximately 3-5% of elementary school children have been diagnosed with this disorder.<sup>4</sup>

Teachers play a major role in the identification and assessment of children's academic and behavioural problems and make primary decision how to help them. Snider, Busch and Arrowood claim that teachers are involved in making the initial referral in 40-60% of the times and thus it is of critical importance that teachers are knowledgeable and objective if they have to play a role in the diagnosis of childhood problems.<sup>5</sup>

The attention deficit hyperactivity disorder child's school success is often dependent on his or her ability to attend to tasks and teacher and classroom expectations with minimal distraction. When a child exhibits behaviours associated with attention deficit hyperactivity, consequences may include difficulties with school and with forming relationships with his or her peers.<sup>5</sup>

The teacher must be firmly in control of the class, while being a sympathetic and warm person. ADD/ADHD children generally are very emotional and loving. They respond well to praise and individual attention. Negative attitudes can be very harmful, particularly to a child with already low self esteem. Small class size is beneficial for these children as they offer less distraction, allowing them a better opportunity to build relationship with their peers and the teacher.<sup>6</sup>

Childhood is a period of growth and development. It has been seen that the developing years are critical as these years lay the foundation for development into a well-adjusted adult. As the child grows up, he/she needs an environment which can be explored to enable the development of self-reliance and doing things on his/her own. All this is possible in an environment when the child has caring caregivers who give quality time to the child, a home where the child feels secure, has a regular attendance in school and has playmates in the neighbourhood to interact with. The goal of education is to promote overall well-being and holistic development of a child, where, psychosocial competencies play a major role.<sup>2</sup>

The preschool period in an individual is the most crucial period in his/ her life, where the child says "Goodbye to babyhood and enters into childhood". This exciting period was the foundation for motor, cognitive, social, emotional, language development and life-long learning enhancing their potentials is the hope of all parents<sup>3</sup>.

Education is meant to mould an individual to function effectively as a social being and a useful citizen. This involves a process of identifying the strengths and

potential of each child and assisting him/her to develop that potential to the fullest. Under-achievers in examinations account for at least quarter of the strength of any school. It is now recognized that they can be assisted to perform to their full potential by scientifically identifying the cause for poor school performance and remedying the cause<sup>4</sup>.

The teacher play a very important role towards maintaining conditions contributing to mental health in the classroom. His attitude towards his work, the way he feels about children are reflected in the atmosphere of his classroom. The behaviour of the teacher towards the children is very important. The teacher can help the children to feel his friendliness and interest in them in many ways<sup>5</sup>.

The survey was conducted in Delhi-NCR, Mumbai, Ahmadabad, and Kolkata Bangalore, Chennai, Hyderabad Chandigarh, Jaipur and Luck now. It covered around 1000 school teachers who said that they have 1-3 children's who are diagnosed with ADHD in every single class. The symptoms of ADHD include restless feeling, often fidgeting with hands or feet, running, climbing, or leaving a seat, when they are expected to sit quiet or remain silent, blurting out answers before hearing the whole question, and having difficulty waiting in line or for their turn.<sup>6</sup>

#### **Need for the study:**

Schools play a crucial and formative role in spheres of cognitive, language, emotional, social and moral development of children. There is now growing recognition that schools have significant role in promoting mental health. Teachers are powerful groups who have in their process of education studied the nature of individual growth. Nearly one in five of children and adolescents will have emotional and behavioural disorders at some time in their growth. Mental disorders in schools amount to 3.12% in students<sup>7</sup>.

The problems faced by these children are difficult, but not insurmountable. In order to achieve his or her full potential, he or she should receive help, guidance and understanding from parents, guidance counsellors and the public education system. Attention deficit is effecting about 5 to 10% of children in India. Recommendations from NMHP and NHP for improvement of child behavioural problem. Most common neurobehavioral problem of childhood. Behaviour interventions are effective in modifying behaviour of attention deficit children<sup>8</sup>. Boys are 6 to 8 times more often affected. The onset occurs before the age of 7 years and a large majority of children's exhibit symptoms by the 4<sup>th</sup> year of age.<sup>9</sup>

Teachers play a major role in the identification and assessment of children's academic and behavioural problems and make primary decision how to help them. Teachers find aggressive behaviour to be of a more serious nature than withdrawn behaviour and that is why children with emotional disturbances are often ignored at schools.<sup>10</sup>

A study was conducted on knowledge and attitude of teachers towards Attention deficit hyperactivity disorder in Iran. The result shows that knowledge about Attention deficit hyperactivity disorder was relatively low 46.9% of respondents agreed that Attention deficit hyperactivity disorder is due to biological and genetic vulnerabilities and caution. 53.1% of all the teachers considered Attention deficit hyperactivity disorder to be the result of parental spoiling. The attitude score towards Attention deficit hyperactivity disorder children was low. 64.8% agree that the same disciplinary rules used for all students should also be applied to Attention deficit hyperactivity disorder students.<sup>11</sup>

A study was conducted to know the prevalence of Attention deficit hyperactivity disorder in an inner city elementary school in Pedro. The result shown that prevalence of Attention deficit hyperactivity disorder in a sample of 403 school aged children was 17.1%. In which 65.2% were boys and 34.8% were girls.<sup>12</sup>

A research was carried out on teachers' knowledge, misconception, and lacks concerning Attention deficit hyperactivity disorder in Barcelona. Nearly 193 teachers were interviewed to measure knowledge, symptoms/diagnosis, and treatment. Result indicated an average of correct responses of 31.67, 63.88 and 40.46% in general knowledge, symptoms/diagnosis, and treatment respectively. Teachers displayed significantly more knowledge in the symptoms/diagnosis scale than in the other scale.<sup>13</sup>

Based on the review of literature and the observation made by the investigator that school teachers have low knowledge and attitude on Attention deficit hyperactivity disorder. So the investigator felt the need to conduct this study to determine the knowledge and attitude of school teachers regarding Attention deficit hyperactivity disorder.

A cross-sectional study was conducted among 238 children attending a child guidance clinic in Kolkata, India to show the prevalence of the disorder in the age group of 5 -12 years. The results of the study revealed that 37 were diagnosed as ADHD and prevalence of ADHD in paediatric clinic was 15.5%, the mean age of boys and girls with ADHD was 8.49 and 6.82 years respectively.

It is quite safe to assume that there will be at least one child with ADHD in every classroom in every school. ADHD children are reported to have difficulty with self-control both at home and in school, to have a tendency to show aggressive behaviours, to suffer from low self-esteem, to have frequent fights with peers, to experience isolation in social situations, to display problems with under achievement, and to have learning disabilities. The work of the teacher becomes much more demanding when some learners have ADHD, as their problems with attention span, impulse control and activity level frequently interfere with activities in the classroom and socially. Primary school teachers often does not undergo special training for the care of ADHD children and so are the vulnerable group. The outcome of such situation is usually determined by the personal efficacy and experience of the teacher<sup>22</sup>.

In India the knowledge about attention deficit hyperactivity disorder among primary school teachers were relatively low. 46.9% of the school teachers agreed that attention deficit hyper activity disorder was due to biological and genetic vulnerabilities. 53.1% of the teachers considered attention deficit hyper activity disorder are the result of parental spoiling. The attitude score towards attention deficit hyper activity disorder children was low; 64.8% of teachers agreed that the same disciplinary rules used for all students should also be applied to attention deficit hyper activity disorder students<sup>10</sup>.

*Attention Deficit Hyperactivity Disorder* a long-term, chronic condition. About half of the children with *Attention Deficit Hyperactivity Disorder* will continue to have troublesome symptoms of inattention or impulsivity as adults. However, adults are often more capable of controlling behaviour and masking difficulties. Statistics show that there is an increased incidence of juvenile delinquency and adult encounters with the law among individuals who had *Attention Deficit Hyperactivity Disorder* as a child. Although *Attention Deficit Hyperactivity Disorder* is believed to be due to primary impairment of attention, impulse control and motor activity, there is also a high prevalence of co-morbidity with other psychiatric disorders. The national institute of mental health reported that 15-25% of children with *Attention Deficit Hyperactivity Disorder* also have language disorders 15-20% are diagnosed with mood disorders 20-25% have coexisting anxiety disorders. They may also have co-occurring sleep disorders memory impairment and decreased motor skill function<sup>11</sup>.

Children are spending more time in schools with teachers and their friends. Teachers are the guidance

for children in the schools. Teachers should give more care to ADHD students, as they need sufficient knowledge regarding ADHD. It is a behavioural disorder, making it difficult to quantify, but it is one of the most prevalent chronic health conditions affecting school-age children. Hence the teacher should have a thorough knowledge regarding ADHD and the investigator felt the need to evaluate the effectiveness of sim on knowledge regarding ADHD among primary school teachers of selected schools in Mohali.

#### Research problem:

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING ATTENTION DEFICIT HYPERACTIVITY DISORDERS AMONG SCHOOL TEACHERS OF SELECTED PRIMARY SCHOOLS IN MOHALI, (PUNJAB)

#### Aim of the study:

The study intend to assess the effectiveness of planned teaching programme regarding Attention Deficit Hyperactivity disorder among primary school teachers.

#### Objectives:

1. To assess the level of pre-test and post-test knowledge of school teachers regarding Attention Deficit Hyperactivity Disorder.
2. To assess the effectiveness of planned teaching programme among primary school teachers in terms of post-test knowledge.
3. To find out the association between demographic variable and knowledge of primary school teachers.

#### Operational definitions used in this study:

##### 1. Structured Teaching Programme:

It is a planned teaching and learning process between the investigator and school teachers that helps the school teachers to change his/her knowledge and attitude regarding attention deficit hyperactivity disorder

##### 2. Knowledge:

It refers to the correct respond given by the primary school teacher the correct Attention Deficit Hyperactivity disorder.

##### 3. Attention deficit hyperactivity disorder:

Attention deficit hyperactivity disorder (ADHD) is the phrase that is used to describe children who have significant problems with high level of distractibility or inattention, impulsiveness and often with excessive motor activity levels.

#### 4. Primary School Teachers:

These teachers are qualified by D.ED., B.Ed, M.ED training for 2 years after +2 and they work in Primary schools as teachers.

#### 5. School:

School is meant an institution for educating children between 1-7 standards only, where there studying boys and girls.

#### Variables

**Independent variable:** Structured teaching programme on attention deficit hyperactivity disorder of children was the independent variable in this study.

**Dependent variable:** Primary school teachers are dependent variable in this study.

#### Hypothesis

**H1:** The primary school teachers will have significant low knowledge on Attention Deficit Hyperactivity Disorders

**H2:** Planned teaching programme significantly increases the knowledge of primary school teachers toward Attention Deficit Hyperactivity Disorder.

#### Assumptions

- A primary school teacher will have some knowledge of Attention Deficit Hyperactivity Disorder.
- A primary school teachers will have unfavourable attitude towards attention deficit hyperactivity disorder
- Planned teaching programme helps the primary school teachers for early identification and increases of knowledge regarding attention deficit hyperactivity disorder.

#### Delimitations

- Teachers who are willing to participate in the study
- Teachers who are present at the time of the data collection.

#### Conceptual Frame Work

J.W. Kenny's General System Model (1936). This model explains the breaking of whole things into parts and gaining knowledge about how the parts works together in a system and decision pertinent concept about them as well as making prediction about how these parts of whole will function, behave and react.

**Input:** Input is a process by which system is able to communicate or react with its environment. It is defined as any information or matter that enters into the system. In this study, the investigator assesses the

pre-test level of knowledge regarding attention deficit hyperactivity disorder of children among primary school teachers and provide structured teaching programme on behavioural attention deficit hyperactivity disorder of children.

**Throughput:** It is the common process by which a system transforms or creates and organizes input, resulting in a reorganization of the input. In this study the samples transforms and organizes the information received from the structured teaching programme on attention deficit hyperactivity disorder of children.

**Output:** It is the end product of a system. It is energy, matter or information given out by the system as a result of its processing. In this study, it refers to the attainment of adequate knowledge on attention

deficit hyperactivity disorder of children by primary school teachers.

The investigator assesses the post-test level of knowledge.

**Feedback**

It is the evaluation or response of the system. Feedback may be positive or negative. In this study feedback emphasize to strengthen the knowledge. The output is based on the information provided to primary school teachers. Positive outcome indicates attainment of adequate knowledge and negative outcome indicates inadequate knowledge which may be motivate to strengthen the knowledge by providing the structured teaching programme again

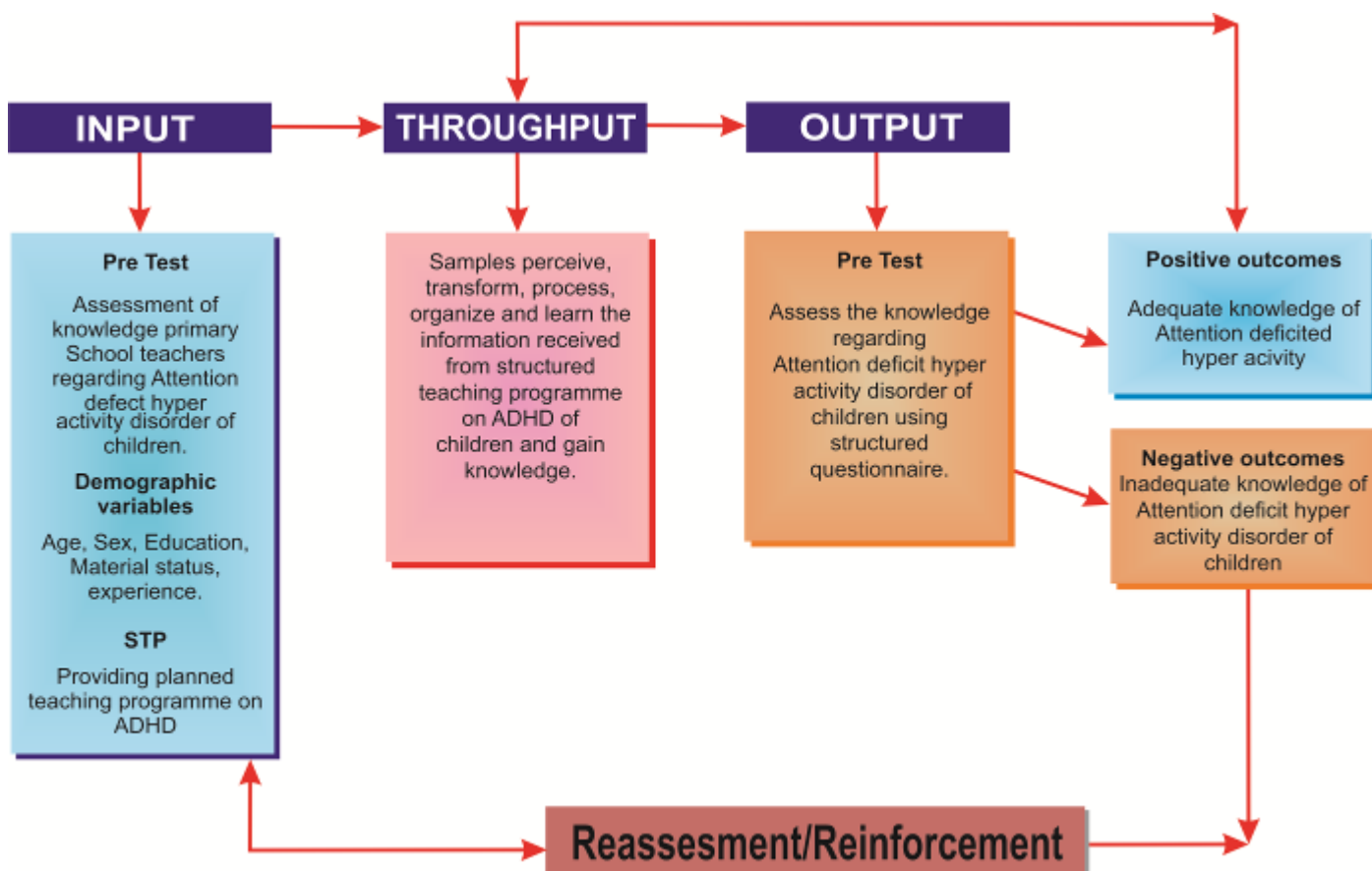


Fig 1 : Conceptual frame work based on modified J.W Kenny's General system model (1936)

**REVIEW OF LITERATURE**

Review of literature is a systematic search of published work to gain information about a research topic. Through the literature review researcher generates a picture of what is known about a particular situation and the knowledge gap that exists between the problem statement and the research subject problems and lays a foundation for the research plan<sup>[21]</sup>.

**SheheryarJovindah (2009)** has conducted a study on “Primary school teacher’s attitude towards Attention Deficit Hyperactivity Disorder in children”. In 95 teachers. Only 35% of the teachers said they have received any training in understanding and management Attention Deficit Hyperactivity Disorder behavior. More than 60% of these teachers had limited understanding of the disorder including over-diagnosis and the use of stimulant medication to treat it. The study found that teachers with some form of training were more likely to work in partnership with parents, and teacher played & vital role in the process of diagnosis and managements of Attention Deficit Hyperactivity Disorder<sup>[18]</sup>.

**Syed EU and Hussein SA (2009)** has conducted a study on “Increase in Teachers' Knowledge about Attention Deficit Hyperactivity Disorder after a Week-Long Training Program: A Pilot Study”. Teachers knowledge regarding signs and symptoms was tested before and after the workshop and then again after 6 months using knowledge questionnaire. Results showed that among forty-nine teachers, completed the questionnaires before and after the training program 35 of them filled it out at the 6-month interval. The authors conclude that the workshop improved the knowledge of the school teachers regarding Attention Deficit Hyperactivity Disorder symptomatology, and it remained significant even after 6 months of training<sup>[16]</sup>.

**Heather A. Jones and Andrea Chronis-Tuscano (2008)** have conducted a study on “Efficacy of teacher in-service training for attention-deficit/hyperactivity disorder”. Teachers from six schools ( $N = 142$ ) were randomly assigned at the school level to receive in-service training immediately or to a waitlist control group that received in-service training 1 month later. Measures of Attention Deficit Hyperactivity Disorder knowledge and use of behavior modification techniques were obtained at pre- and post-in-service intervention. The conclusion from the study was that the in-service training resulted in increased Attention Deficit Hyperactivity Disorder knowledge. Special education teachers also reported increased use of behavior modification techniques resulting from the in-service training.<sup>[15]</sup>

**Dr Julie M. Kos (2008)** has presented a paper in ‘The European Conference on Educational Research in Gothenburg, Sweden’ (2008) Conference on “What Do Primary School Teachers Know, Think and Do about ADHD?” This paper has concluded that Victorian (Australian) primary school teachers’ knowledge about Attention Deficit Hyperactivity Disorder was reasonable, though there was considerable room for improvement. Further, teachers perceived themselves to know significantly less than they actually know about the disorder, which may indicate that teachers are aware of their lack of knowledge.<sup>[19]</sup>

**Jeneva L. Ohan, Nieole Cormier (2008) et.al** has conducted a study on “Does knowledge about attention-deficit/hyperactivity disorder impact teacher’s reported behaviors and perceptions” in Melbourne. Consistent with previous international findings teachers demonstrated good overall knowledge about Attention Deficit Hyperactivity Disorder with strengths in knowledge of Symptoms / Diagnosis and weaknesses in knowledge of cause and treatment.<sup>[6]</sup>

**Jarque Fernandez S, Tarraga Mingueg R, (2007) et.al** has conducted a study on “Teachers' knowledge, misconceptions, and lacks concerning Attention Deficit Hyperactivity Disorder”. 193 teachers completed the Knowledge of Attention Deficit Hyperactivity Disorder (KADDS) (Spanish version), adapted by the authors of this research. The result of the study indicated an average of correct response of 31.67, 63.88, and 40.46% in general knowledge, symptoms/ diagnosis and treatment respectively. Their knowledge correlated positively with experience, number of hyperactive pupils in their classrooms, and level of perceived self-efficacy.<sup>[10]</sup>

**Ghanizadeh A, Bahredar MJ, (2006) et.al** has conducted a study on “knowledge and attitudes towards Attention Deficit Hyperactivity Disorder among elementary school teachers”. 196 elementary school teachers anonymously completed a self-report questionnaire on Attention Deficit Hyperactivity Disorder. The conclusion from the study was that teacher’s knowledge and attitude score about Attention Deficit Hyperactivity Disorder are relatively low and there is a significant correlation between teacher knowledge of Attention Deficit Hyperactivity Disorder and their attitude.<sup>[11]</sup>

**Bruna Bekle, Edith Cowan University (2004)** has conducted a study on “Knowledge and attitudes about Attention-Deficit Hyperactivity Disorder (ADHD): A comparison between practicing teachers and undergraduate education students.” The study concluded that there are some knowledge gaps and both practicing teachers and undergraduate education students have sound information about primarily concerned dietary treatment.<sup>[12]</sup> Attention Deficit Hyperactivity Disorder; misconceptions about Attention Deficit Hyperactivity Disorder

**Rebecca L verbeb, and James C. Diperna, (2004)** has conducted a study on “Teachers knowledge of Attention Deficit Hyperactivity Disorder treatments for Attention Deficit Hyperactivity Disorder and treatment Acceptability”. Results indicated that teachers' knowledge of Attention Deficit Hyperactivity Disorder, years of teaching experience with students with Attention Deficit Hyperactivity Disorder, and training demonstrated positive relationships with ratings of medication acceptability. In addition, teacher’s participation in Attention Deficit Hyperactivity Disorder training was positively correlated with knowledge of Attention Deficit Hyperactivity Disorder and acceptability of behavior management strategies.<sup>[5]</sup>

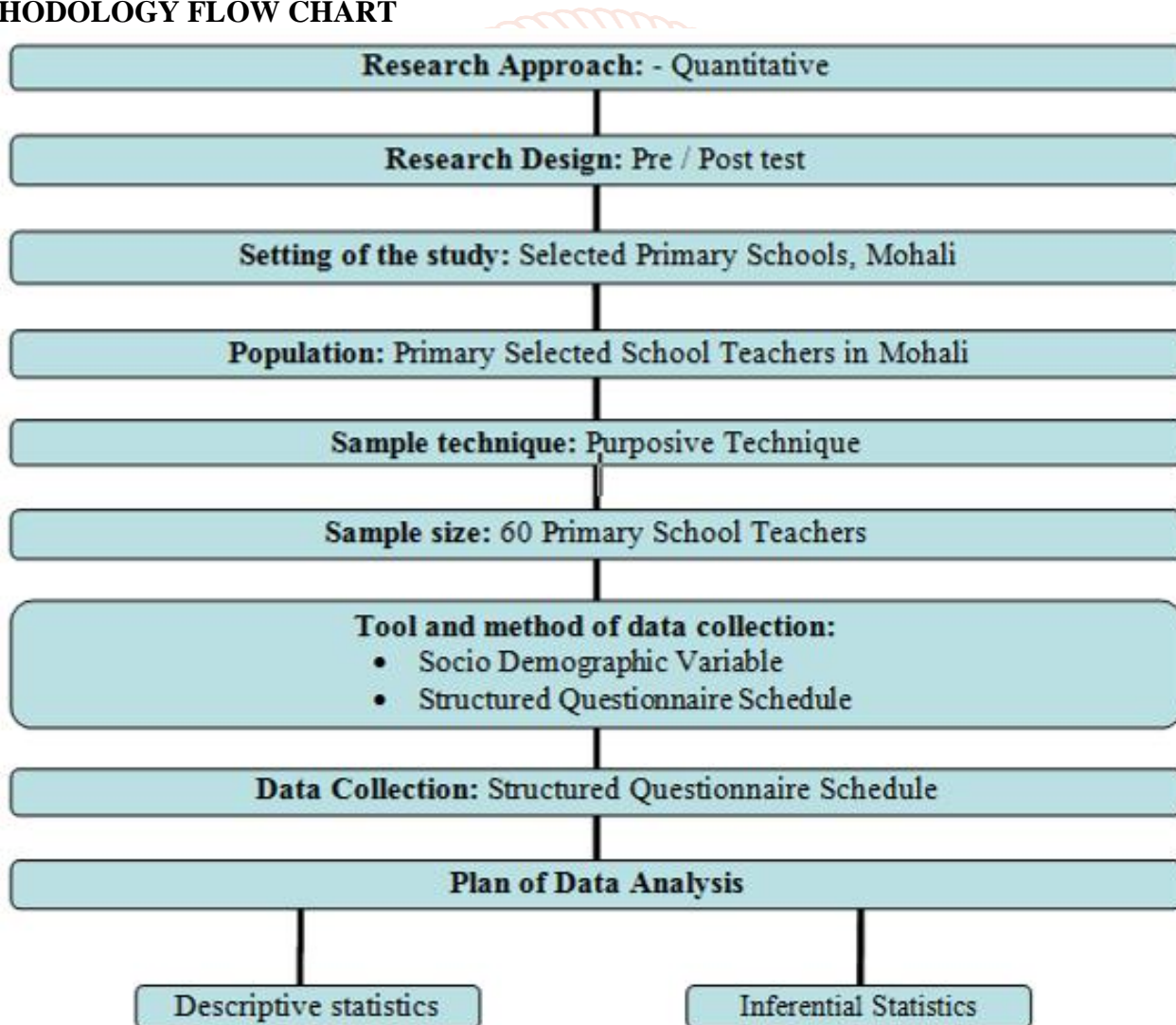
**Fevizye Toros (2003)** has conducted a study on “Attitude and Knowledge about Attention Deficit Hyperactivity Disorder in Teachers” in 81 school teachers staffing from 2 schools selected randomly. A questionnaire was

designed to determine the knowledge and attitudes of teachers. The study concluded that there are no find differences in knowledge and attitudes about Attention Deficit Hyperactivity Disorder between regular classroom teachers and branch teachers. Findings suggest that teachers generally believe stimulants are useful for children with Attention Deficit Hyperactivity Disorder. However, their knowledge of the effects of stimulants and information of Attention Deficit Hyperactivity Disorder was limited and that they had received little education about Attention Deficit Hyperactivity Disorder.<sup>[15]</sup>

**Dr. Laurence Jerome, Paulene Washington(1999)et.al** has Conducted a study on “Is teacher’s knowledge regarding attention Deficit Hyperactivity Disorder (ADHD) improving?” A sample of 42 teacher’s in-training, just completing their pre-service training modules prior to beginning to teach, was sampled using the original questionnaire. Conclusion from the study was that there was no evidence that current pre-service training had significantly improved the knowledge base of teachers in-training in comparison to previous samples of practicing Canadian teachers. The original result of younger practicing Canadian teachers obtaining better scores on the questionnaire could not be supported by current pre-service training experience based on this samples performance on the questionnaire.<sup>[17]</sup>

A thorough review of literature revealed that there were only very few studies carried out to assess the knowledge and attitude of primary school teachers regarding Attention Deficit Hyperactivity Disorder especially in India where 17% of the total world population lives and 4-20% of school children suffer from Attention Deficit Hyperactivity Disorders.

**METHODOLOGY FLOW CHART**



**Figure No.: 2: The schematic representation of research methodology**

**SHEMROCK SCHOOL**



**GURU GOBIND SINGH PUBLIC SCHOOL**



**VIDYA VALLEY SCHOOL**





## METHODOLOGY

This chapter of methodology deals with a brief description of the difference steps undertaken for conducting the study. The research approach, research design, data collection techniques, tools, description of the setting, sample and procedure for data collection and plan of data analysis are included in this chapter.

### Research approach:

It is an applied form of research that involves finding out how well a programme practice procedure or policies are working. It is a goal to assess or evaluate the success of a program.

- Polit (2004)

The approach used for the study is quantitative, educative and evaluative approach.

### Research Design:

A researcher's overall plan for obtaining answers to the research questions are for testing the research hypothesis that is referred to as research design.

- Polit & Hungler (1995)

The research design used for this study is Pre-experimental one group pre-test – post-test design.

$$O1 \times O2 = E$$

### Key:

O1 - Pre-test on attention deficit hyperactivity disorder of children

X - Intervention (structured teaching programme on attention deficit hyperactivity disorder of children.

O2 - Post-test on attention deficit hyperactivity disorder of children.

E - Effectiveness of structured teaching programme on attention deficit hyper activity disorder of Children.

### Research setting:

The main study was conducted in Guru Gobind School, Phase-IX, Mohali, Vidya Valley School, Sunny Enclave, Sector 125, Mohali and Shem Rock School, Sector 69, Mohali.

### Variables under Study:

A variable is a measurable component of an object or event that may fluctuate in quantity quality or that may be different in quantity or quality from one individual object or event to another individual object or event of the same general class.

- Manoj Kumar Yadav (2009)

### Population:

According to Polit and Hungler, "Population refers to the entire aggregation of cases that meets designed criteria". The requirement of defining a population for a research project arises from the need to specify the group to which the study can be performed. The population for the present study are the school teachers at Mohali District.

### Target population:

The target population of the study is primary school teachers in Mohali

### Sampling technique:

The sample has selected by purposive sampling technique.

### Sample size:

The sample comprises 60 primary school teachers from Guru Gobind Singh School, Vidya Valley School, Shemrock school Mohali District.

### Sampling criteria:

#### A. Inclusion criteria

- School teachers working in selected schools at Mohali.
- School teachers who are present at the time of data collection.

#### B. Exclusion criteria

- School teachers who are not willing to participate in the study.
- School teachers who are not present at the time of data collection.

### Selection and development of tools:

A structured questionnaire schedule were prepared to assess the prevalence of attention deficit hyperactivity disorder among Mohali students.

The following steps were carried out in preparing the tools:

- Preparation of blueprint.
- Consultation with guide, co-guide and subject experts.

#### **Description of tool:**

- Socio demographic data such as age, sex, education, marital status Residence, religion, educational qualification, teaching experience, knowledge about ADHD, source of information.
- Structured questionnaire schedule.

#### **Validity of tool:**

The instruments were validated by 5 experts from the field of nursing and medicine. The experts suggested the addition and deletion of certain items and reorganization of the questions.

Appropriate modifications were made, and the tool was finalized.

#### **Pilot study:**

It is a small scale versions or trial run of the main study. In order to test the feasibility and relevance of the study, a pilot study was conducted.

The pilot study was conducted among 6 primary school teachers in The spanning kids school, after getting permission from concerned authorities. They were selected by using purposive sampling technique. The self-administered questionnaire was used to collect the data from primary school teachers. Data analysis was done using differential and inferential statistics. The study reports ensured feasibility of the study.

#### **Reliability of tool:**

To ensure reliability test, pre-test method was used. The self-administered questionnaire was tested among 6 primary school teachers who were not included in the study. After seven days, the same tool was administered without any manipulation to the same school teachers. The relative score position of the subjects were almost same. The co-efficient of Co-relation was found to be 0.8, which was indicated as high degree of reliability of the questionnaire

#### **Data collection procedure:**

- Before the collection of data investigator was meet the Principal of the college in order to establish support and co-operation for the success of study.
- The investigator was explain the nature of the study to authority.
- Formal permission was taken from the college authority for data collection according to the convenience of the college schedule.
- The investigator were introduced by the class teacher to the respondents.
- The investigator was read out the instructions and assurance about the confidentiality of the answers will be given.
- The investigator was prepare the self-structured questionnaire tools for the data collection.
- Written consent was obtained from teachers for data collection.
- The average time given to fill the self-structured questionnaire tools will be one hour.

#### **Ethical considerations:**

- Ethical approval from college ethical committee will be taken to conduct the study.
- Prior formal permission was taken from the school authority.
- An informed consent was taken from the participants before conducting the study.

#### **Plan for data analysis:**

Collected information during research study was analyzed by using both descriptive and inferential statistical methods. It involves four steps:

- Data preparation includes compilation, editing, coding, classification, and tabulation was done.
- Describing the data with mean, standard deviation, Frequency and percentage.
- Interpretation of the data was done with the help of parametric statistical test for example chi-square test, and paired T test, statistical analysis.
- Demographic variables in categories was given in frequencies with their percentages.
- The association between Attention Deficit Hyperactivity with their selected demographic variables.

#### **Data analysis**

- The collected data was organized, tabulated and analysed by using descriptive and inferential statistics.

- A Frequencies and percentages were used for the analysis of the demographic data.
- Mean score, mean percentage and standard deviation of difference were used for analyzing the pre-test and post test scores.
- Paired 't' test was used to find out the inference in knowledge between the pre-test and post-test.
- Chi-square test was used to find out the association between the level of knowledge in the pre-test and demographic variables of the primary school teachers.

### Summary:

This chapter includes research design, research setting, target population, sample size, sampling techniques, inclusion criteria, method of data collection, selection and development of tool, description of tool, validity of the tool, development of tool, reliability of the tool, pilot study, data collection procedure, ethical consideration, plan of data analysis.

### ANALYSIS AND INTERPRETATION

Analysis is the process of categorizing, organizing, manipulating and summarizing the data to obtain answers to research question. The purpose of analysis is to reduce data to intangible and interpretable form, from which the relations of research problem can be studied and tested.

-Polit, (2004).

### ORGANIZATION OF FINDINGS:

#### SECTION I

Frequency and percentage distribution of primary school teachers as per the selected demographic variable.

#### SECTION II

Analysis of pre-test and post-test knowledge score of the primary school teachers on different aspects of attention deficit hyperactivity disorder of children.

#### SECTION III

Comparison of primary school teacher's pre-test and post-test knowledge scores regarding attention deficit hyperactivity disorder of children.

#### SECTION IV

Association between the knowledge of primary school teachers regarding attention deficit hyperactivity disorder and selected demographic variables.

#### SECTION- I

#### DESCRIPTION OF SOCIO DEMOGRAPHIC VARIABLES OF PRIMARY TEACHERS

Background characteristics of the sample included in the present study were: age in years, gender, marital status, residence, religion, type of family, educational qualification, teaching experience, the subject handled by teacher, knowledge about ADHD, where did you come to know about ADHD.

**Table – 1: Frequency and percentage distribution of primary teachers according to their selected socio Demographic variables.**

**N= 60**

Variables	Range	Percentage	Frequency
Age in years	Below 30 years	46.7%	28
	30-39	35.0%	21
	40-49	18.3%	11
	Above 50 years	0.0%	0
Gender	Male	23.3%	14
	Female	76.7%	46
Marital Status	Married	48.3%	29
	Unmarried	45.0%	27
	Divorced	5.0%	3
	Widow/widower	1.7%	1
Residence	Urban	70.0%	42
	Semi urban	25.0%	15
	Rural	5.0%	3

Religion	Sikh	45.0%	27
	Hindu	31.7%	19
	Muslim	13.3%	8
	Christian	8.3%	5
	Other	1.7%	1
Types of Family	Nuclear family	71.7%	43
	Extended Family	16.7%	10
	Joint Family	11.7%	7
Educational Qualification	D.Ed.	33.3%	20
	B.Ed.	36.7%	22
	M.Ed.	25.0%	15
	Other	5.0%	3
Teaching Experience	<5 years	53.3%	32
	6 -10 years	40.0%	24
	11-15 years	6.7%	4
	15-20 years	0.0%	0
	More than 20 years	0.0%	0
The Subjects being Handled by Teacher.	Language (English / Hindi / Punjabi)	23.3%	14
	Science	35.0%	21
	Mathematics	36.7%	22
	Others	5.0%	3
Do you have Knowledge about ADHD in your Curriculum?	Yes	60.0%	36
	No	40.0%	24
If yes, - from where did you come to know about ADHD	In Service education	25.0%	15
	Mass Media	21.7%	13
	News papers	1.7%	1
	Family members & friends	5.0%	3
	Other source	6.7%	4

**Table I and figure 3-21** shows the frequency and distribution of subjects according to socio-demographic data.

#### Age

- Table 1 and figure 3 revealed that out of 60 subjects majority i.e 28 (46.7%) were in the below range of 30 years followed by 21 (30.39%), 11(18.3 )were 40-49 years of age and 0 (0%) were above 50 years.

#### Gender

- Table 1 and figure 4 revealed that out of 60 subjects majority i.e 46 (76.7%) were female and 14 (23.3%) were male.

#### Marital status

- Table 1 and figure 5 revealed that out of 60 subjects majority i.e 29 (43.3%) were married, 27 (45.0%) were unmarried, 3(5.0%) were divorced and 1(1.7%) were Widow/widower.

#### Residence

- Table 1 and figure 6 revealed that out of 60 subjects majority i.e 42(70.0%) were staying in urban area,15.(25.01%)are in semi urban,3(5.01%) are in rural areas.

#### Religion

- Table 1 and figure 7 revealed that out of 60subjects majority i.e 27(45.0%) were Sikh, 19(31.7%) were Hindu, 8(13.3%)were Muslim and 5(8.3%)were Christian and 1(1.7%) is belong to other.

#### Type of family

- Table 1 and figure 8 revealed that out of 60 majority i.e 43 (71.7%) were nuclear and 10 (16.7%) were extended family and 7(11.7%) were joint family.

#### Educational qualification

- Table 1 and figure 9 revealed that out of 60 subjects majority i.e 20 (33.3%) were educated, D.Ed, 22 (36.7%) were educated B.Ed, 15 (25.0%) were educated M.ED, 3 (5.0%) were educated other.

**Teaching experience**

➤ Table 1 and figure 10 revealed that out of 60 majority 32 (53.3%) were less than 5 year experience and 25 (40.0%) were 6-10 years experience.

**Residence**

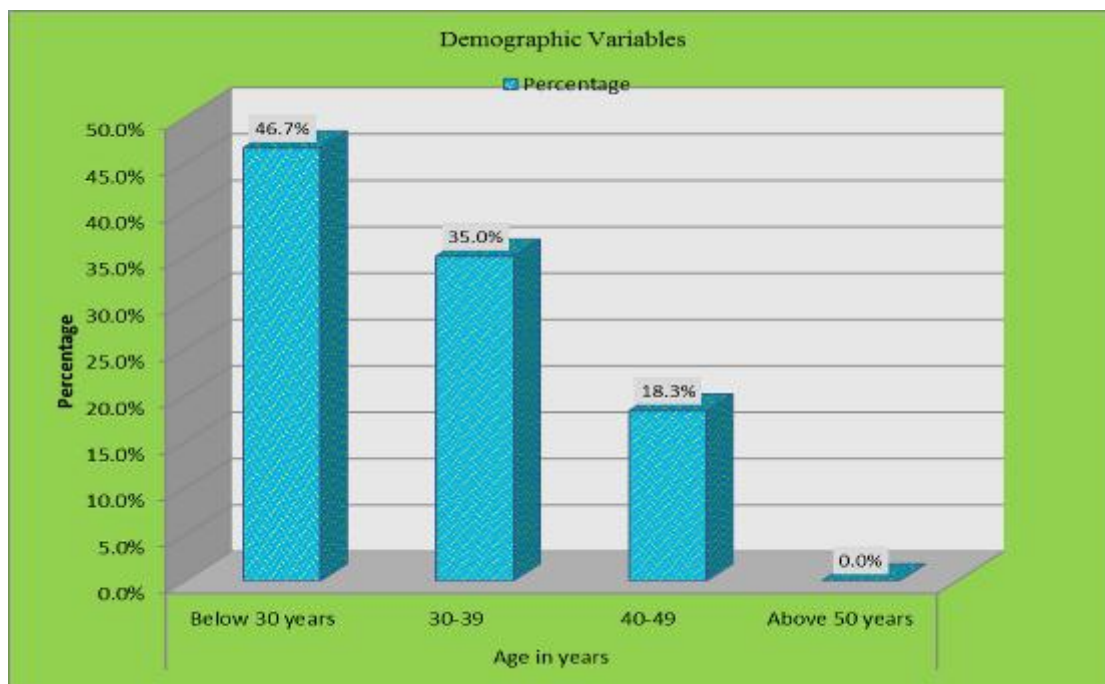
➤ Table 1 and figure 11 revealed that out of 60 subjects majority i.e 22(36.7%) were handled mathematics,21.(35.0%) handled science,14(23.3%) handled language subjects and 3(5.0%) handled other subjects.

**Previous knowledge about ADHD**

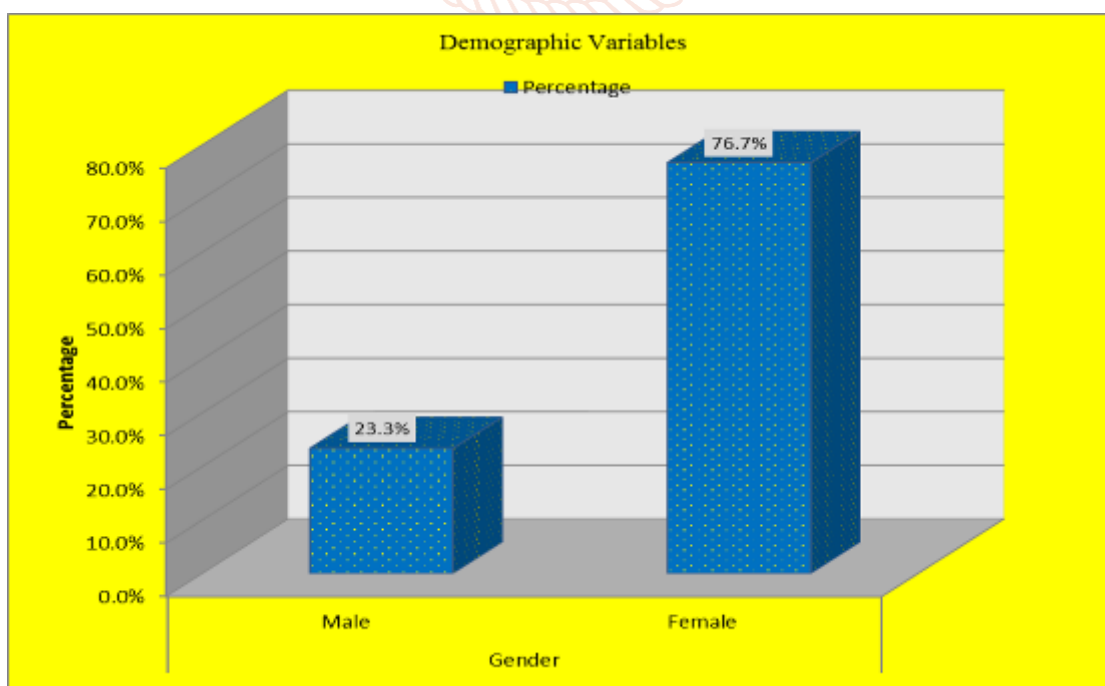
➤ Table 1 and figure 12 revealed that out of 60 subjects majority i.e 36 (60.0%) were yes previous knowledge and 24 (40.0%) were previous knowledge about ADHD.

**If yes, source of information through**

Table 1 and figure 13 revealed that out of 60 subjects majority i.e 15 (25.0%) in service education,13(21.7%) were information through mass media, 9 (7.5%) were information through newspaper, 1.7 (1%) were information through family members \$ friends, 4 (6.7%) were other source.



**Figure No: 3 Percentage distribution among primary school teacher by their Age**



**Figure No: 4 Percentage distribution among primary school teacher by their gender.**

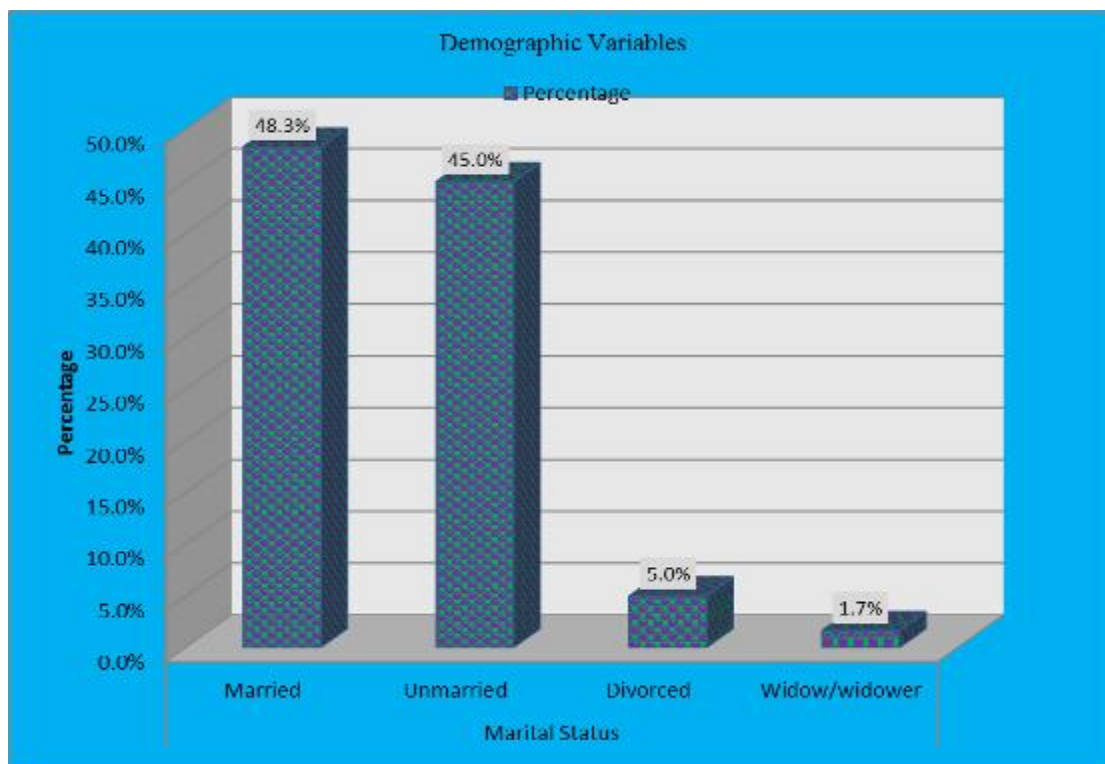


Figure No: 5 Percentage distribution among primary school teacher by their marriatal status

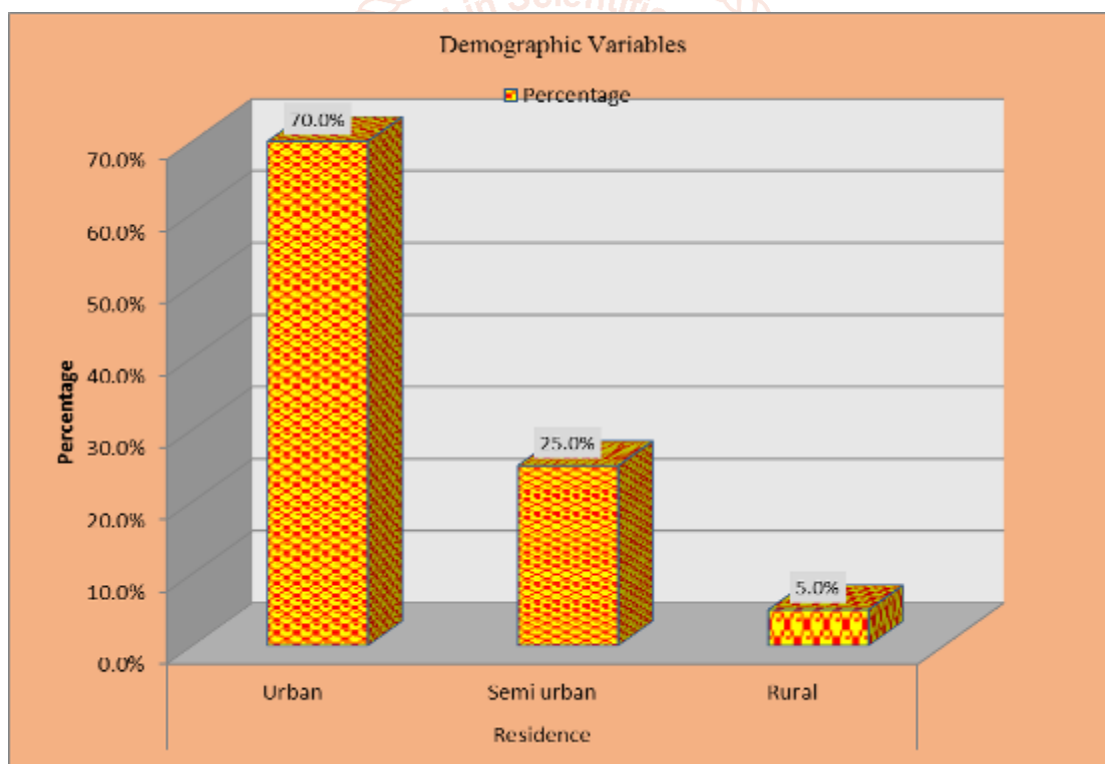


Figure No: 6 Percentage distribution among primary school teacher by their residence.

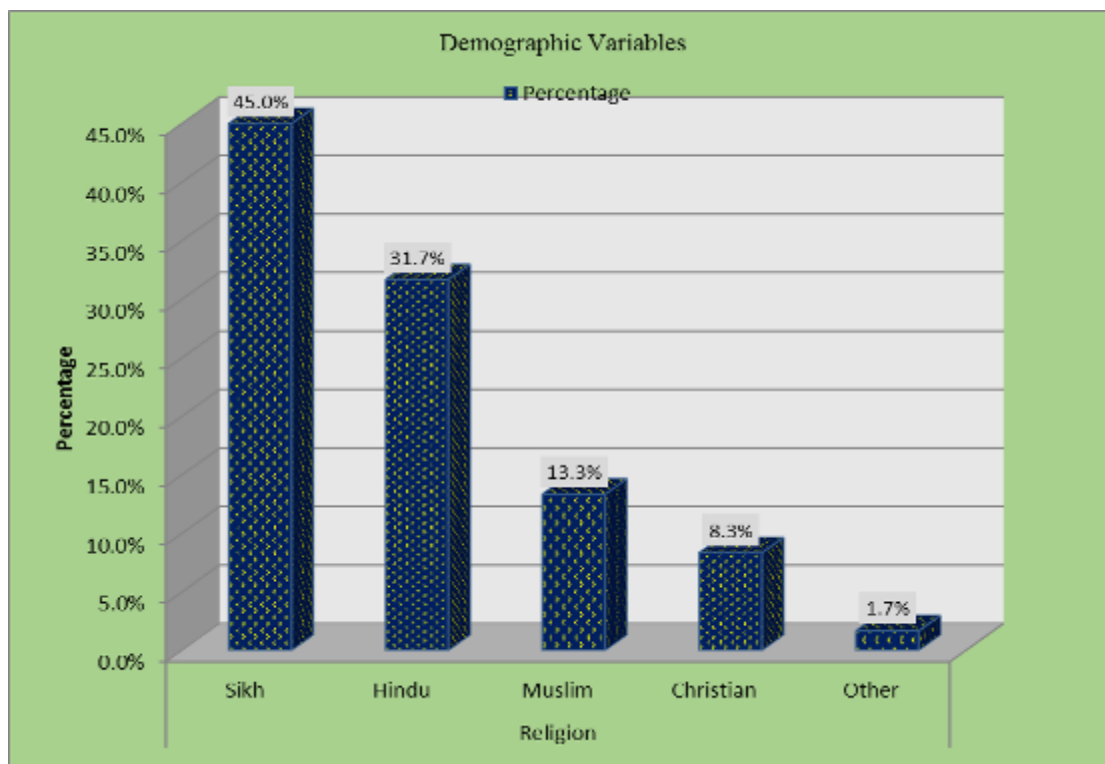


Figure No: 7 Percentage distribution among primary school teacher by their residence.

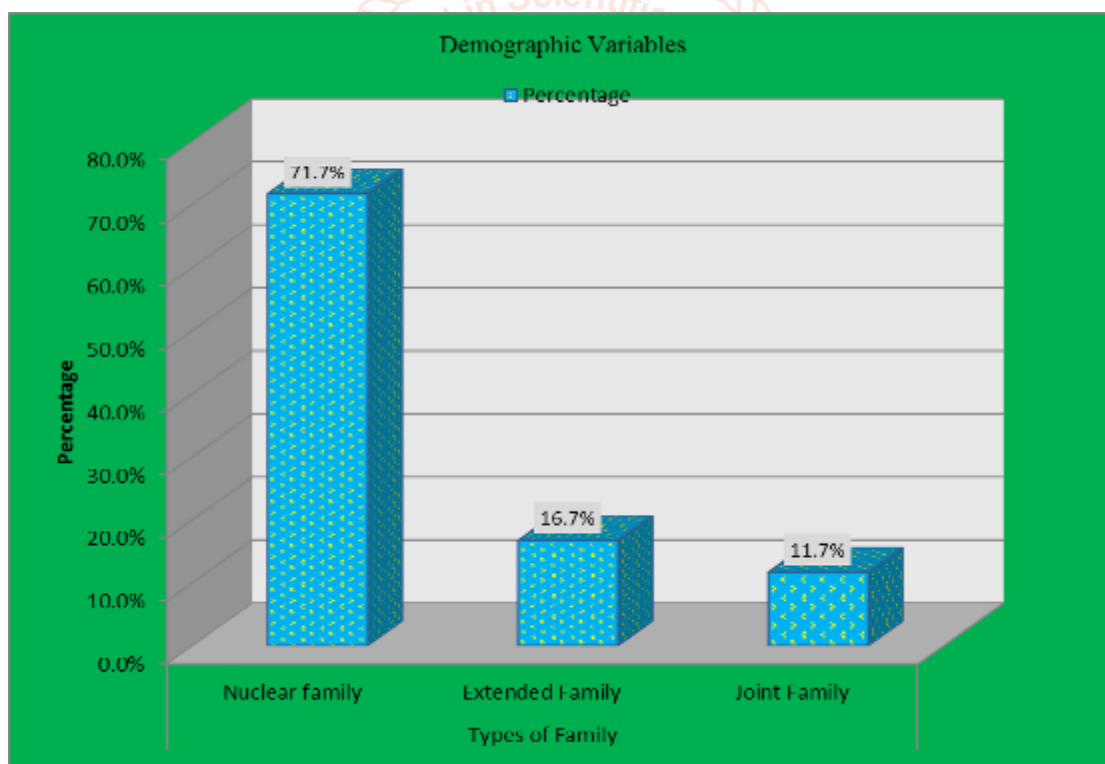
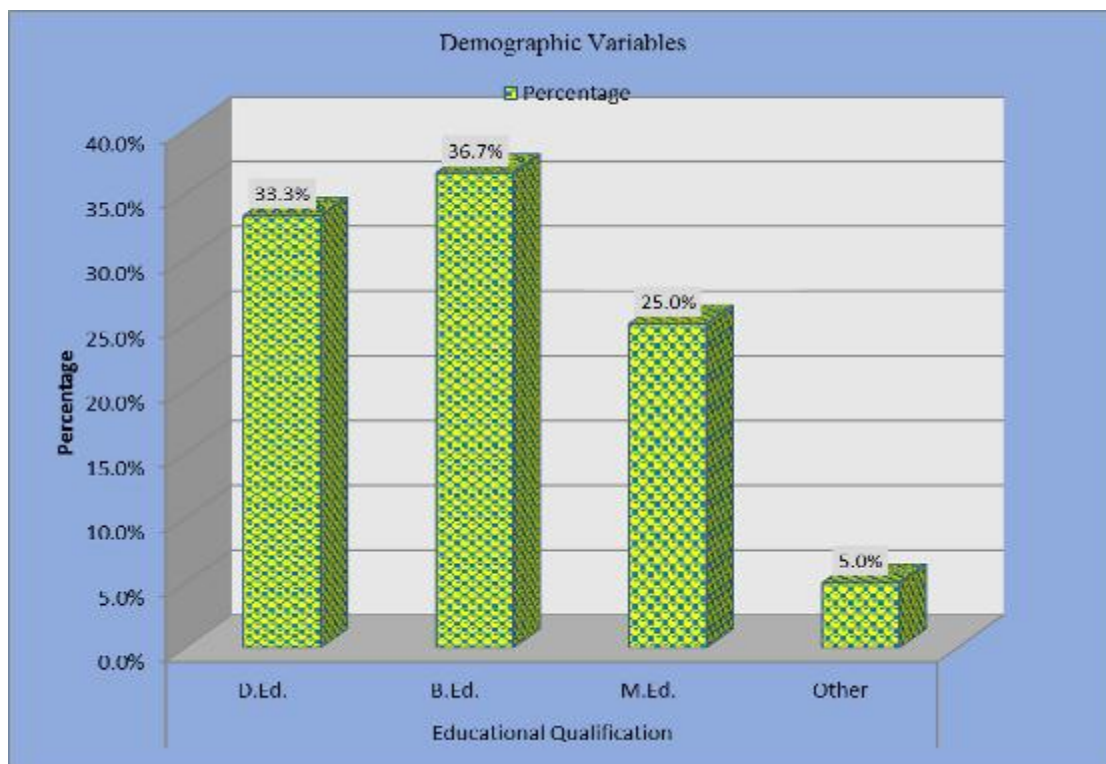
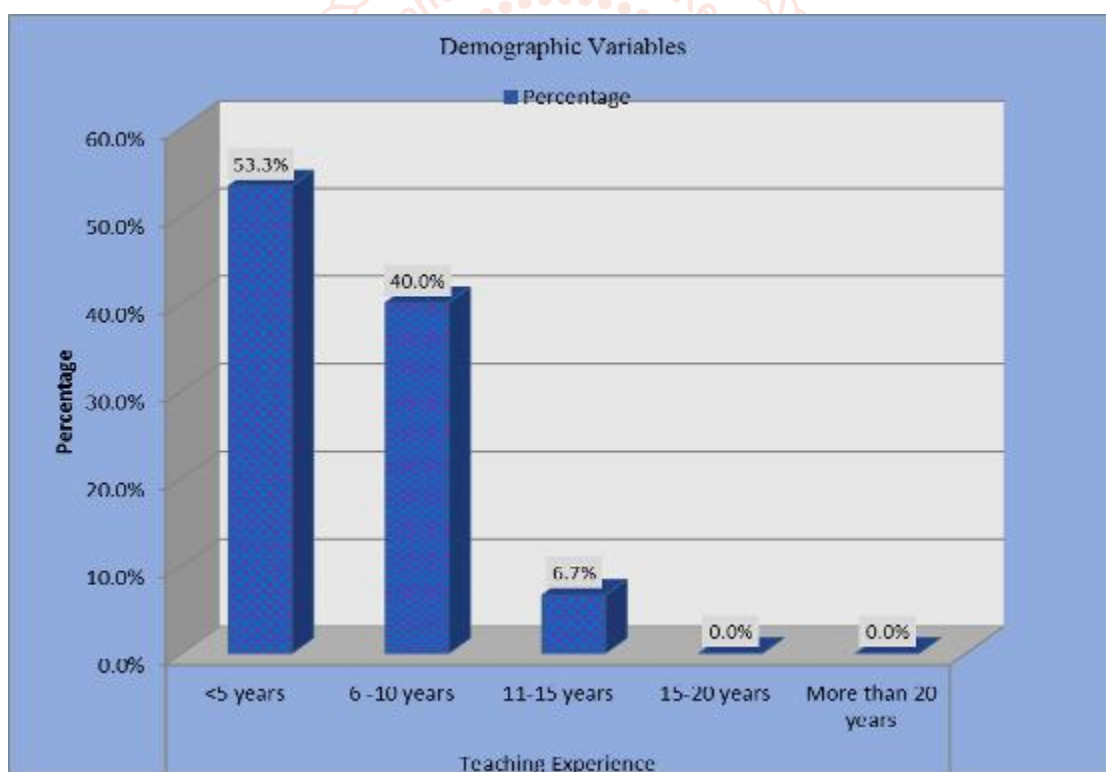


Figure No: 8 Percentage distribution among primary school teacher by their types of family.



**Figure No: 9 Percentage distribution among primary school teacher by their educational qualification.**



**Figure No: 10 Percentage distribution among primary school teacher by their teaching experience.**



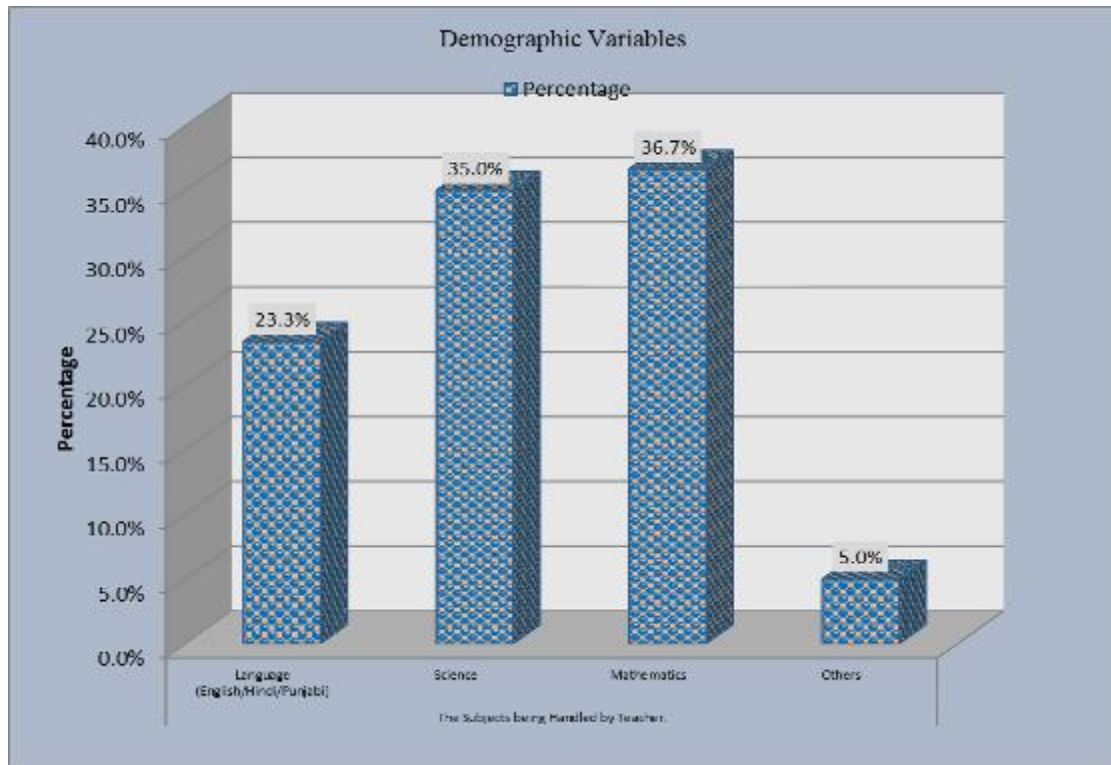


Figure No: 11 Percentage distribution among primary school teacher by their handled subjects.

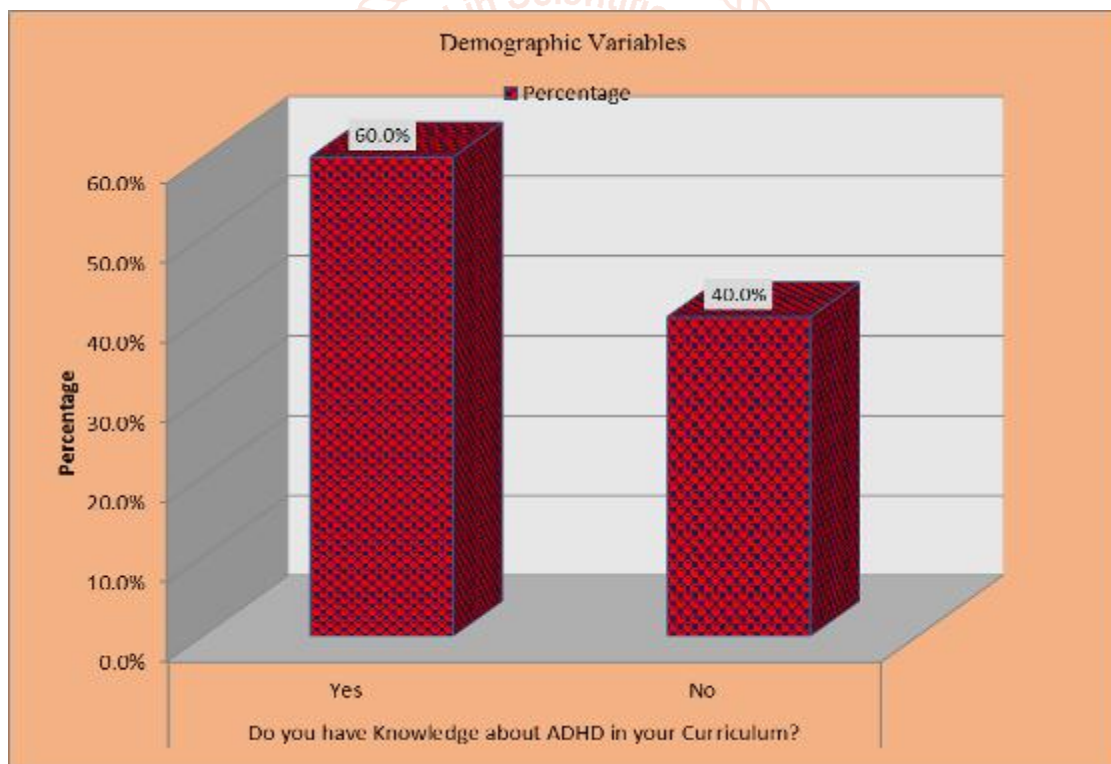


Figure No:12 Percentage distribution among primary school teacher by their previous knowledge of ADHD.

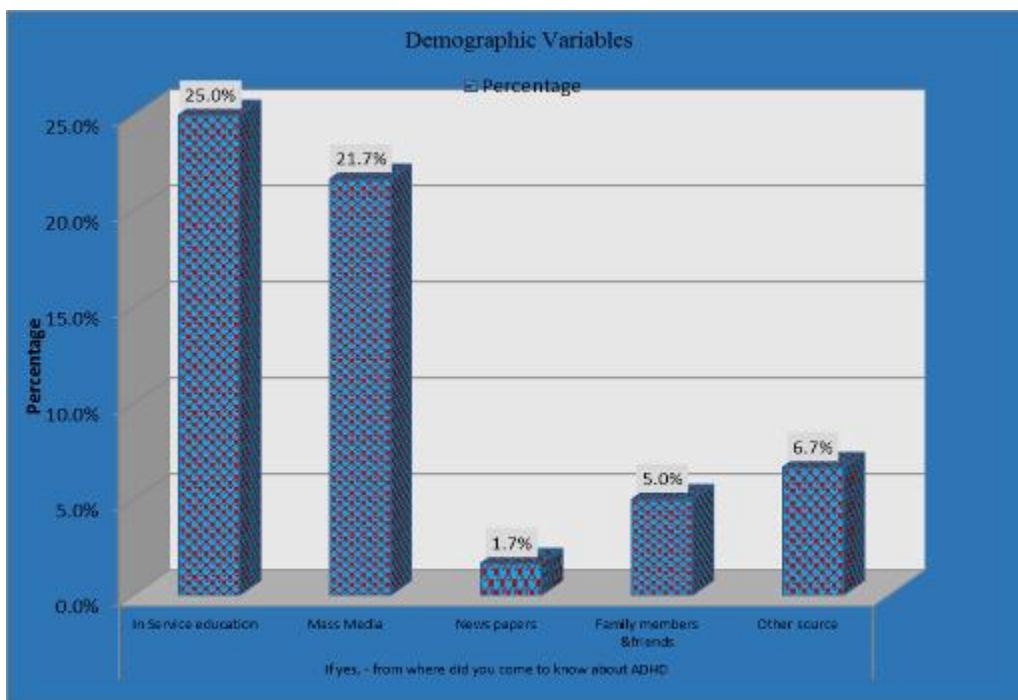


Figure No: 13 Percentage distribution among primary school teacher by their source of knowledge of ADHD.

**SECTION –II OBJECTIVE 1(a):** To assess pre-test level of knowledge regarding attention deficit hyperactivity disorder of children among primary school teachers.

**Table No: 2(a) Frequency and percentage distribution of Pre- test knowledge regarding attention deficit hyperactivity disorder of children among primary school teachers.**  
(N=60)

CRITERIA MEASURE OF PRETEST KNOWLEDGE SCORE	
Score Level (N= 60)	PRE-TEST (F%)
INADEQUATE.(0-7)	48(80%)
MODERATE.(8-14)	12(20%)
ADEQUATE.(15-22)	0(0%)
Maximum score=22 Minimum score =0	

Table 2 (a) and figure 22 shows the Frequency and percentage distribution of pre-test knowledge regarding ADHD of children among primary school teachers. In pre-test, majority of sample i.e 48(80%) primary school teachers had inadequate knowledge, whereas 12(20%) primary school teachers had moderate knowledge and none of them had adequate knowledge.

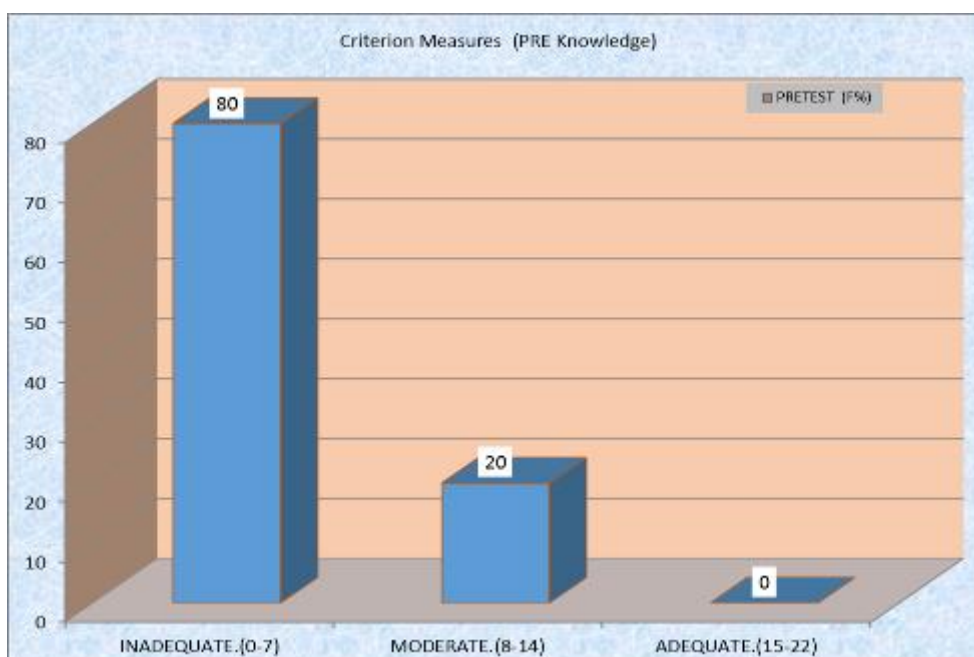


Figure No: 14 Showing frequency percentage of Level of Score of pre- test

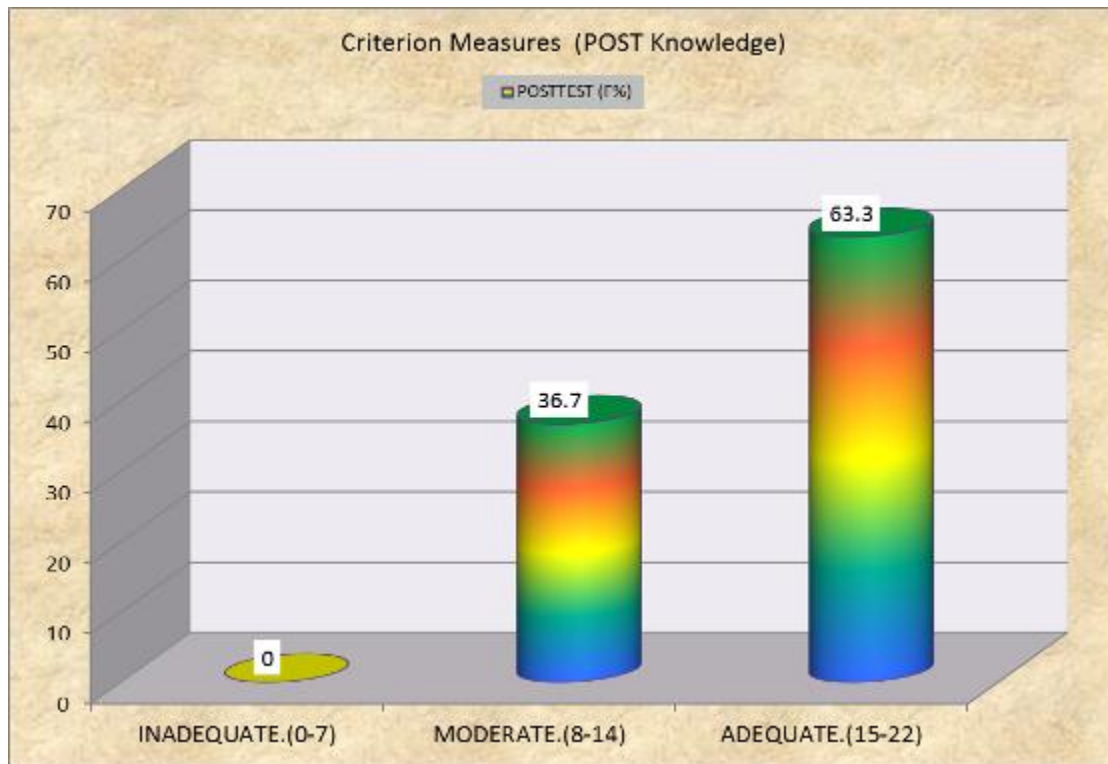
**OBJECTIVE 1(b):** To assess Post-test level of knowledge regarding attention deficit hyperactivity disorder of children among primary school teachers.

**Table No: 2(b) Frequency and percentage distribution of Post- test knowledge regarding attention deficit hyperactivity disorder of children among primary school teachers.**

(N=60)

CRITERIA MEASURE OF POSTTEST KNOWLEDGE SCORE	
Score Level (N= 60)	POSTTEST (F%)
INADEQUATE.(0-7)	0(0%)
MODERATE.(8-14)	22(36.7%)
ADEQUATE.(15-22)	38(63.3%)
	Maximum score=22 Minimum score=0

Table 2 (A) and figure 12 shows the Frequency and percentage distribution of pre-test knowledge regarding ADHD of children among primary school teachers. In post –test the majority of sample i.e,22(36.7%) primary school teachers had moderate knowledge whereas 38(63.3%) primary school teachers adequate knowledge and none of them had adequate knowledge.



**Figure No: 15 Showing frequency percentage of Level of Score of post- test**

**OBJECTIVE 2:** To assess the effectiveness of planned teaching programme among primary school teachers in terms of post-test knowledge.

**Table No: 3 Comparison of knowledge scores of primary school teachers regarding attention deficit hyperactivity disorder of children in the pre-test and post-test**

N=60

Paired T Test	Mean±S.D.	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
Pretest Knowledge	5.95±2.045	27.00	2-11	9.380	26.139 *Sig	<0.00 1	2.00
Post Test Knowledge	15.33±1.743	69.70	13-18				
<b>** Significance Level 0.05</b>					<b>Maximum=22 Minimum=0</b>		

**Table 3 and figure 13 shows** Frequency and percentage distribution, mean and standard deviation between pre-test and post-test. Comparison of pre- test and post-test s score related to ADHD among children were assessed

by using paired ‘t’ test. The overall mean score of pre-test were (mean %age 27,00%) 5.95( SD±2.045) and mean score of post- test were ( mean %age 69.70%) 15.33(SD±1.743). The calculated paired ‘t’ test p-value was  $p < 0.01$ . Thus the research hypothesis was accepted. There for the hypothesis  $H_2$  stating that there will be association between teachers and planned teaching programme were highly significant ( $p < 0.01$ ).

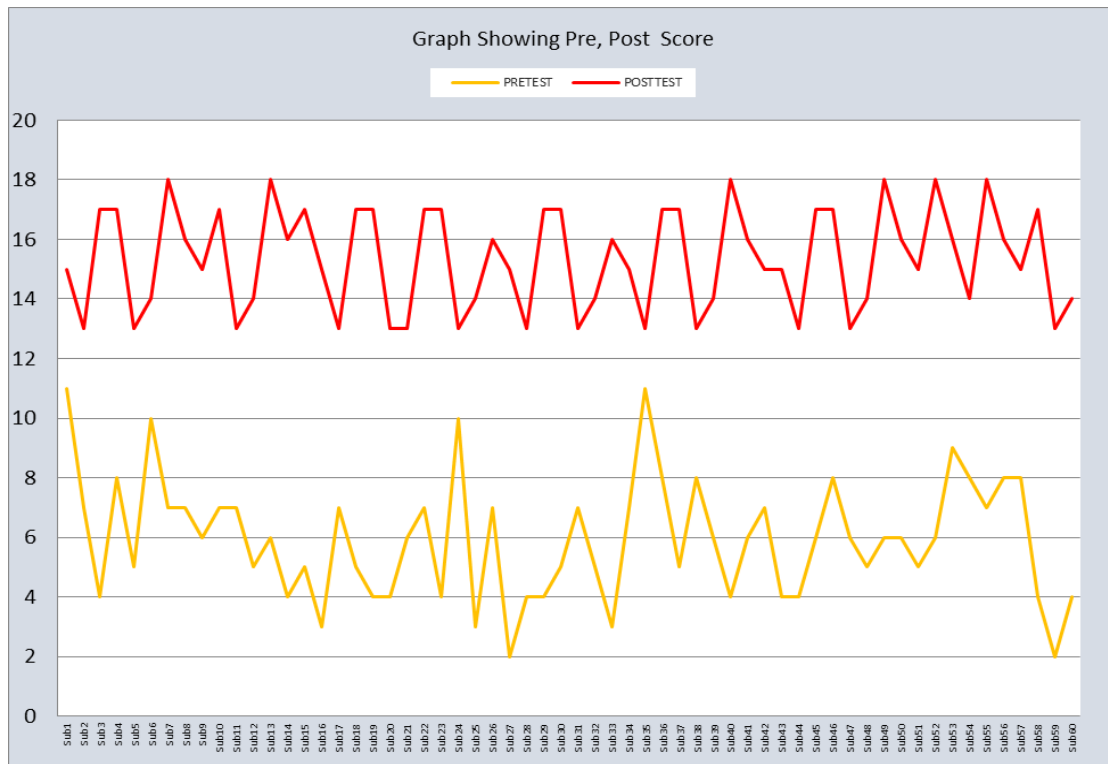


Figure No: 16 Showing frequency percentage of individual Score of pre-test and post- test

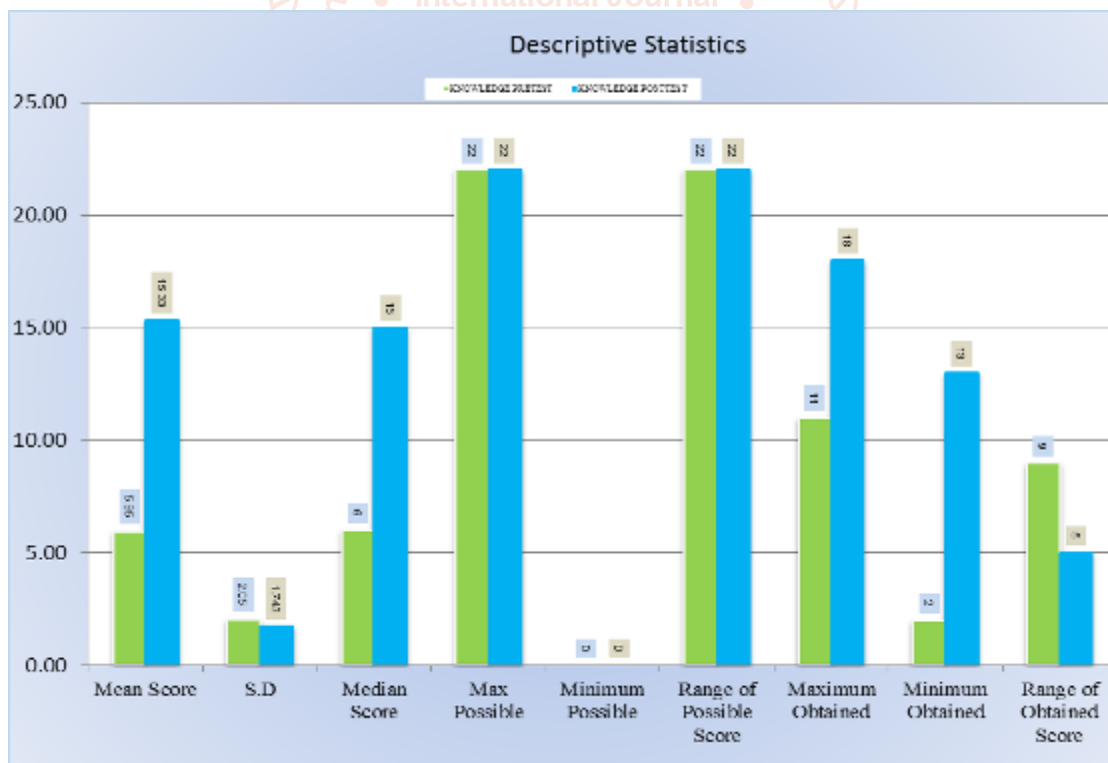


Figure No: 17 Showing descriptive statistics of pre-test and post- test

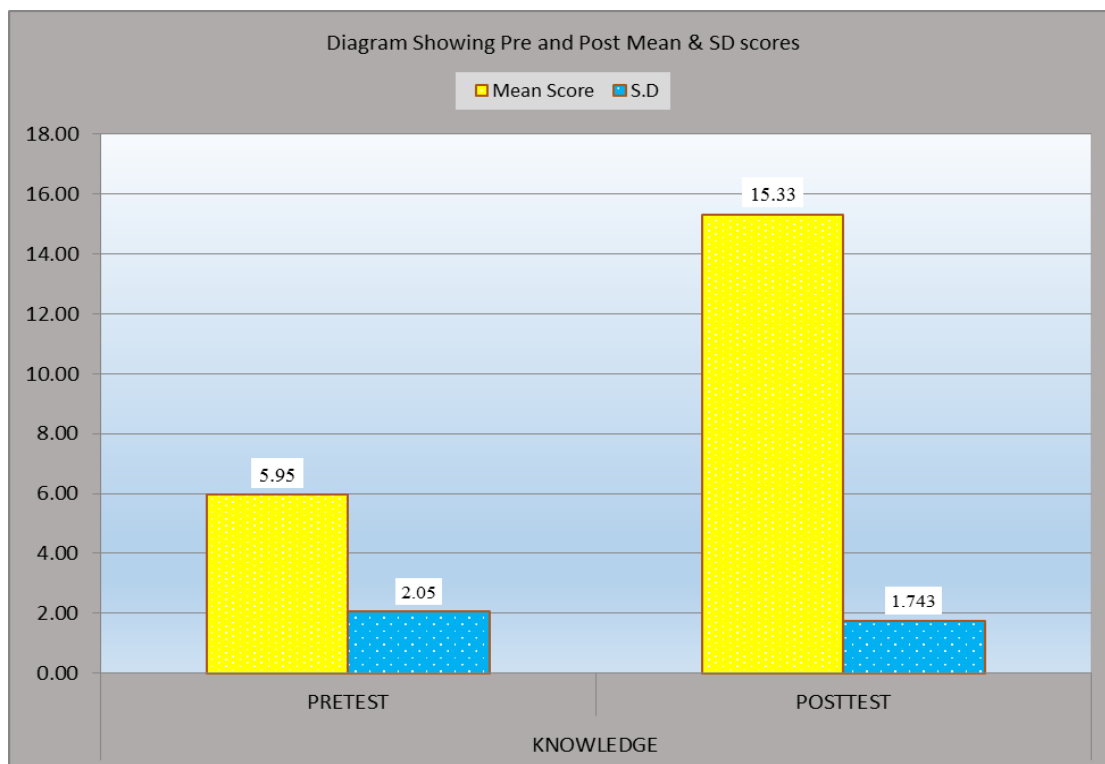


Figure No: 18 Showing frequency percentage of mean and SD score of pre-test and post- test

**SECTION - III**

**Objective 3:-** To find out association between demographic variable and knowledge of primary school teachers.

This section deals with the findings related to the association between score and selected demographic variables. The chi-square test was used to determine the association between the score levels and selected demographic variables

**Table 4 (a)**

Association Of Pretest Knowledge Scores Of With Selected Socio-Demographic Variables.									
Variables	Range	Adequate	Moderate	Inadequate	Chi Test	P Value	df	Table Value	Result
Age in years	Below 30 years		5	23	0.456	0.796	2	5.991	Not Significant
	30-39		4	17					
	40-49		3	8					
	Above 50 years		0	0					
Gender	Male		2	12	0.373	0.542	1	3.841	Significant
	Female		10	36					
Marital Status	Married		6	23	4.796	0.187	3	7.815	Not Significant
	Unmarried		5	22					
	Divorced		0	3					
	Widow/widower		1	0					
Residence	Urban		7	35	2.708	0.258	2	5.991	Not Significant
	Semi urban		5	10					
	Rural		0	3					
Religion	Sikh		8	19	3.162	0.531	4	9.488	Not Significant
	Hindu		2	17					
	Muslim		1	7					
	Christian		1	4					
	Other		0	1					
Types of Family	Nuclear family		10	33	1.053	0.591	2	5.991	Not Significant
	Extended Family		1	9					
	Joint Family		1	6					

Educational Qualification	D.Ed.		5	15	5.369	0.147	3	7.815	Not Significant
	B.Ed.		3	19					
	M.Ed.		2	13					
	Other		2	1					
Teaching Experience	<5 years		3	29	5.768	0.056	2	5.991	Not Significant
	6 -10 years		7	17					
	11-15 years		2	2					
	15-20 years		0	0					
	More than 20 years		0	0					
The Subjects being Handled by Teacher.	Language (English/Hindi / Punjabi)		2	12	0.733	0.865	3	7.815	Not Significant
	Science		4	17					
	Mathematics		5	17					
	Others		1	2					
Do you have Knowledge about ADHD in your Curriculum?	Yes		8	28	0.278	0.598	1	3.841	Not Significant
	No		4	20					
If yes, - from where did you come to know about ADHD	In Service education		5	10	3.363	0.499	4	9.488	Not Significant
	Mass Media		3	10					
	News papers		0	1					
	Family members & friends		0	3					
	Other source		0	4					

Table 4(a) depicts the information regarding association of pre-test knowledge level related to ADHD used by the patients with socio- demographic variables.

### 1. Age

Table 4(a) depicts the association between pre test knowledge of primary school teachers with age. This table show the chi square value is 0.456 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and age. score at  $p < 0.05$ .

### 2. Gender

Table 4(a) Depicts the association between pre-test knowledge of primary school teachers with gender. This table show the chi square value is 0.373 at degree of freedom 1. It is concluded that there has no significant association between knowledge level and gender score at  $p < 0.05$ .

### 3. Marital status

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with marital status. This table show the chi square value is 4.796 at degree of freedom 3. It is concluded that there has no significant association between knowledge level and marital status score at  $p < 0.05$ .

### 4. Residence

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with residence. This table show the chi square value is 2.708 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and residence score at  $p < 0.05$ .

### 5. Religion

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with religion. This table show the chi square value is 3.162 at degree of freedom 4. It is concluded that there has no significant association between knowledge level and religion score at  $p < 0.05$ .

### 6. Types of family

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with types of family. This table show the chi square value is 1.053 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and types of family score at  $p < 0.05$ .

### 7. Educational qualification

Table 4 (a) depicts the association between pre-test knowledge of primary school teachers with educational qualification. This table show the chi square value is 5.369 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and educational qualification score at  $p < 0.05$ .

### 8. Teaching experience

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with Teaching experience. This table show the chi square value is 5.768 at degree of freedom 3. It is concluded that there has no significant association between knowledge level and teaching experience score at  $p < 0.05$ .

### 9. Subjects handled by teachers.

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with subjects handled by teachers. This table show the chi square value is 0.733 at degree of freedom 3. It is concluded that there has no significant association between knowledge level and subjects handled by teachers score at  $p < 0.05$ .

### 10. Previous knowledge about ADHD

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with previous knowledge about ADHD. This table show the chi square value is 0.278 at degree of freedom 1. It is concluded that there has no significant association between knowledge level and previous knowledge about ADHD score at  $p < 0.05$ .

### 11. Source of information

Table 4(a) depicts the association between pre-test knowledge of primary school teachers with source of information. This table show the chi square value is 3.363 at degree of freedom 4. It is concluded that there has no significant association between knowledge level and source of information score at  $p < 0.05$ .

**Table 4(b)**

Association Of Posttest Knowledge Scores Of With Selected Socio-Demographic Variables.									
Variables	Range	Adequate	Moderate	Inadequate	Chi Test	P Value	df	Table Value	Result
Age in years	Below 30 years	20	8		1.503	0.472	2	5.991	Not Significant
	30-39	12	9						
	40-49	6	5						
	Above 50 years	0	0						
Gender	Male	8	6		0.373	0.583	1	3.841	Not Significant
	Female	30	16						
Marital Status	Married	18	11		3.486	0.323	3	7.815	Not Significant
	Unmarried	19	8						
	Divorced	1	2						
	Widow/widower	0	1						
Residence	Urban	25	17		0.923	0.630	2	5.991	Not Significant
	Semi urban	11	4						
	Rural	2	1						
Religion	Sikh	17	10		1.315	0.859	4	9.488	Not Significant
	Hindu	11	8						
	Muslim	6	2						
	Christian	3	2						
	Other	1	0						
Types of Family	Nuclear family	30	13		3.227	0.199	2	5.991	Not Significant
	Extended Family	4	6						
	Joint Family	4	3						
Educational Qualification	D.Ed.	12	8		0.405	0.939	3	7.815	Not Significant
	B.Ed.	15	7						
	M.Ed.	9	6						
	Other	2	1						

Teaching Experience	<5 years	19	13	1.103	0.576	2	5.991	Not Significant
	6 -10 years	17	7					
	11-15 years	2	2					
	15-20 years	0	0					
	More than 20 years	0	0					
The Subjects being Handled by Teacher.	Language (English/Hindi/Punjabi)	9	5	1.931	0.587	3	7.815	Not Significant
	Science	15	6					
	Mathematics	13	9					
	Others	1	2					
Do you have Knowledge about ADHD in your Curriculum?	Yes	24	12	0.431	0.512	1	3.841	Not Significant
	No	14	10					
If yes, - from where did you come to know about ADHD	In Service education	9	6	2.954	0.566	4	9.488	Not Significant
	Mass Media	8	5					
	News papers	1	0					
	Family members & friends	2	1					
	Other source	4	0					

### 1. Age

Table 4(b) depicts the association between post-test knowledge of primary school teachers with age. This table show the chi square value is 1.503 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and age. score at  $p < 0.05$

### 2. Gender

Table 4(b) Depicts the association between post-test knowledge of primary school teachers with gender. This table show the chi square value is 0.373 at degree of freedom 1. It is concluded that there has no significant association between knowledge level and gender score at  $p < 0.05$ .

### 3. Marital status

Table 4(b) depicts the association between post-test knowledge of primary school teachers with marital status. This table show the chi square value is 3.486 at degree of freedom 3. It is concluded that there has no significant association between knowledge level and marital status score at  $p < 0.05$ .

### 4. Residence

Table 4(b) depicts the association between post-test knowledge of primary school teachers with residence. This table show the chi square value is 0.923 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and residence score at  $p < 0.05$ .

### 5. Religion

Table 4(b) depicts the association between post-test knowledge of primary school teachers with religion.

This table show the chi square value is 1.315 at degree of freedom 4. It is concluded that there has no significant association between knowledge level and religion score at  $p < 0.05$

### 6. Types of family

Table 4(b) depicts the association between post-test knowledge of primary school teachers with types of family. This table show the chi square value is 3.227 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and types of family score at  $p < 0.05$ .

### 7. Educational qualification

Table 4(b) depicts the association between post-test knowledge of primary school teachers with educational qualification. This table show the chi square value is 0.405 at degree of freedom 2. It is concluded that there has no significant association between knowledge level and educational qualification score at  $p < 0.05$ .

### 8. Teaching experience

Table 4(b) depicts the association between post-test knowledge of primary school teachers with Teaching experience. This table show the chi square value is 1.103 at degree of freedom 3. It is concluded that there has no significant association between knowledge level and teaching experience score at  $p < 0.05$ .

### 9. Subjects handled by teachers.

Table 4(b) depicts the association between post-test knowledge of primary school teachers with subjects handled by teachers. This table show the chi square



value is 1.931 at degree of freedom 3. It is concluded that there has no significant association between knowledge level and subjects handled by teachers score at  $p < 0.05$ .

### 10. Previous knowledge about ADHD

Table 4(b) depicts the association between post-test knowledge of primary school teachers with previous knowledge about ADHD. This table show the chi square value is 0.431 at degree of freedom 1. It is concluded that there has no significant association between knowledge level and previous knowledge about ADHD score at  $p < 0.05$

### 11. Source of information

Table 4(b) depicts the association between post-test knowledge of primary school teachers with source of information. This table show the chi square value is 2.954 at degree of freedom 4. It is concluded that there has no significant association between knowledge level and source of information score at  $p < 0.05$ .

## DISCUSSION

This chapter discuss about the important findings of the research to interpret the findings, data was obtained regarding knowledge attention deficit hyperactivity disorder of children among teachers in selected primary schools at Mohali District".

### Discussion was based upon objectives

#### 1. To assess the level of pre –test and post –test knowledge of school teachers regarding attention deficit hyperactivity disorder.

In pre-test, 48(80%) primary school teachers had inadequate knowledge, 12(20%) primary school teachers had moderate knowledge and none of them had adequate knowledge.

In post-test, 0(0%) primary school teachers had inadequate knowledge, 22(36.7%) primary school teachers had moderate knowledge and 38(63.3%) primary school teachers adequate knowledge.

#### 2. To assess the effectiveness of planned teaching programme among primary school teachers in terms of post- test knowledge.

The difference between the overall pre-test (5.95) and post-test (15.33) mean scores revealed the effectiveness of the planned teaching programme on attention deficit hyperactivity disorder of children. Hence, there is significant increase in knowledge of the primary school teachers regarding attention deficit hyperactivity disorder after their exposure to planned teaching program. Hence H<sub>2</sub> is accepted

#### 3. To find out the association between knowledge on ADHD of children among primary school teachers and selected demographic variables.

There is no significant association between the pre-test knowledge of primary school teachers and demographic variables of age in years (0.796) gender (P=0.542), education (P=O.), marital status (0167.), residence(0.258), religion (0.531)the subjects being handled(0.587). Types of family (0.187), knowledge about ADHD (0.512), source of knowledge (0.566). Hence null hypothesis rejected. In comparison to other study it shows that a study conducted by **Syed EU and Hussein SA (2009)** on "Increase in Teachers' Knowledge about Attention Deficit Hyperactivity Disorder after a Week-Long Training Program: A Pilot Study". Teachers knowledge regarding signs and symptoms was tested before and after the workshop and then again after 6 months using knowledge questionnaire. Results showed that among forty-nine teachers, completed the questionnaires before and after the training program 35 of them filled it out at the 6-month interval. The authors conclude that the workshop improved the knowledge of the school teachers regarding Attention Deficit Hyperactivity Disorder symptomatology, and it remained significant even after 6 months of training [16].

In my study the seen Comparison of pre- test and post-test score related to ADHD among children were assessed by using paired 't' test. The overall mean score of pre-test were (mean %age 27,00%) 5.95(SD±2.045) and mean score of post- test were ( mean %age 69.70%) 15.33(SD±1.743). The calculated paired 't' test p-value was  $p < 0.01$ . Thus the research hypothesis was accepted. There for the hypothesis H<sub>2</sub> stating that there will be association between teachers and planned teaching programme were highly significant ( $p < 0.01$ ).

## SUMMARY, CONCLUSION AND RECOMMENDATION

### INTRODUCTION:

The primary aim of the study was to identify the pre-test knowledge score of teachers regarding attention deficit hyperactivity disorder of children after the administration of structured teaching programme. In pre-test and post-test knowledge was assessed to find out the association between the knowledge of teachers and selected demographic variables.

### SUMMARY:

The present study assessed the knowledge and practice regarding attention deficit hyperactivity disorder of children and found the school teachers had inadequate knowledge. After structured teaching programme on attention deficit hyperactivity disorder of children there is significant improvement on school teachers' knowledge. The study concluded that the structured teaching programme was effective in

improving knowledge regarding attention deficit hyperactivity disorder of children.

### STATEMENT OF THE PROBLEM:

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING ATTENTION DEFICIT HYPERACTIVITY DISORDERS AMONG SCHOOL TEACHERS OF SELECTED PRIMARY SCHOOLS IN MOHALI, (PUNJAB)

### OBJECTIVES OF THE STUDY:

1. To assess the level of pre-test and post-test knowledge of school teachers regarding attention deficit hyperactivity disorder.
2. To assess the effectiveness of planned teaching programme among primary school teachers in terms of post-test knowledge.
3. To find out the association between demographic variable and knowledge primary school teachers.

The source of the data collection from the review of literature books, internet, med lines, journals information which helped the investigators to gain in depth of knowledge regarding quality of life, experiences and expectations of elderly.

The conceptual framework is adopted for the study is based on modified J.W. Kenny's General System Model (1936). It provides the comprehensive framework for achieving the objective of the study.

### METHODOLOGY:

The research design adopted for this study was pre-experimental design and research approach adopted for this was to evaluative the educative approach. The sample size was 60 teachers by purposive sampling method. Teachers were selected in selected Primary schools at Mohali District.

Data was collected by using structured questionnaire, this consists of two sections.

**Section I** - Demographic variables

**Section II** - Questionnaire regarding knowledge.

A pilot study was conducted with 6 primary teachers from The spanning kids school Mohali. Reliability of the tool was determined by the split half method The co-efficient of Co-relation was found to be 0.98, which was indicated as high degree of reliability of the questionnaire. The pilot study revealed that the study was feasible.

The main study was conducted with sample size 60. The obtained data were analyzed in terms objectives and hypothesis using descriptive and inferential statistics.

### THE STUDY FINDINGS WHERE AS FOLLOWS:

The following were the results of this study.

In pre-test, 48(80%) primary school teachers had inadequate knowledge, 12(20%) primary school teachers had moderate knowledge and none of them had adequate knowledge.

- In post-test, 38(63.3%) primary school teachers had adequate knowledge, 22(36.7%) primary school teachers had moderate knowledge and none had inadequate knowledge.
- The difference between the overall pre-test and post-test knowledge mean difference scores was 9.380, which revealed the effectiveness of the planned teaching programme on attention deficit hyperactivity disorder of children. Hence, there was a significant increase in knowledge of the school teachers regarding attention deficit hyperactivity disorder of children after their exposure to the structured teaching programme on attention deficit hyperactivity disorder of children.
- Further, the paired't test was used to find the significant difference between the overall pre-test and post-test knowledge score. The 't' value 26.139 was significant at  $p < 0.05$ . Hence there was significant difference between the overall pre-test and post-test knowledge score, and that difference was due to the exposure of the school teachers to planned teaching programme.
- There was no significant association between the level of knowledge of age and selected demographic variables.

### CONCLUSION:

The following conclusions were drawn from the study:

- In the present study 60 subjects participated
- The findings of the study reveals the effectiveness of planned teaching programme.
- The researcher has full satisfaction in conducting study which is focused a teachers group. The experts opinions and direction from the guide, and help from psychiatric authorities made the study useful.

### IMPLICATION OF THE STUDY:

The finding of study of implication are related to, nursing administration, nursing practice, nursing education, nursing research, and psychiatry regarding the increase in knowledge related to attention deficit hyperactivity disorder of children.

### **Nursing Implications:**

The findings of the study have implications in the field of nursing education, nursing practice and nursing research.

### **Nursing Education:**

Nursing curriculum is a measure for motivating the students "to hunt for knowledge". It equips nurses with essential knowledge, skill and attitude for the prevention, promotion, early detection and management of attention deficit hyperactivity disorder of children. Developmental childhood disorders are important in paediatric, psychiatric and community nursing. School health services play an important part in the care of such children. Nursing students should be given necessary theoretical and practical knowledge on school health programmes and how to utilize other professionals like teachers in health care. Curriculum should give additional importance in developing communication skill of the student nurses for better utilization of available resources.

### **Nursing Practice:**

Nurses play vital role at imparting health services in all levels of prevention, promotion and treatment. Nurses active participation in school health programmes by providing direct and indirect care helps to achieve these goals of health services. Teachers deficit in knowledge regarding prevention of attention deficit hyperactivity disorder indicate the need for arranging health education sessions in related topic.

### **Nursing Administration:**

The nursing administrators at institutional, local, state and national level should focus their attention to make the public conscious about the causes, risk factors and pre-disposing factors of mental health problems of children. Mass media may be utilized to educate the public. Health administrators should influence the education department to include the emotional problems of children in the curriculum of the teachers training programme. In collaboration with the education department, health administrators should assist in providing personnel to conduct short term courses to school teachers regarding the attention deficit hyperactivity disorder of children, so that they can be resource personnel.

### **NURSING RESEARCH:**

The researcher found scarcity in literature and research done on attention deficit hyperactivity disorder in nursing. So the investigator recommends conducting periodic research on childhood disorders and role of nurses.

### **LIMITATIONS:**

1. Knowledge of school teachers assessed through structured questionnaire.
2. The study was restricted to selected schools at Mohali District.
3. The study was limited to primary school teachers only.
4. The sample for the study was limited to 60 teachers only.
5. The data was collected by purposive sampling method.

### **RECOMMENDATION:**

1. Periodic revision of teachers training programme and recommend the inclusion of more practical, knowledge regarding attention deficit hyperactivity disorder.
2. Periodic assessment of teacher's knowledge regarding adhd related problems of school children to be conducted.
3. A study can be carried out to evaluate the efficiency of various teaching strategies like, pamphlets, and computer assisted instruction on attention deficit hyperactivity disorder.
4. A study may be conducted among school teachers on mental health problems like conduct disorder, attention deficit disorder, temper tantrum and other emotional problems individually.
5. A concentrated effort should be made to increase the awareness among the school teachers in their role in school mental health services.
6. Arrange an orientation programme for teachers to various special schools, child guidance clinic.
7. Arrange an orientation programme on attention deficit hyperactivity disorder among children.
8. Counselling centre should be offered in the schools.

### **SUGGESTIONS FOR FURTHER STUDY:**

1. Periodic revision of the teacher's training program and recommend for the incursion of more practical knowledge regarding attention deficit hyperactivity disorder of children.
2. Periodic assessment of teachers' knowledge regarding mental health related problems of school children to be conducted.
3. A study can be carried out to evaluate the efficiency of various teaching strategies like pamphlets, charts and computer assisted instruction on attention deficit hyperactivity disorder of children.

4. A concentrated effort should be made to increase the awareness among the school teachers regarding their role in school health service.

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