

**THE EFFECTIVENESS OF STRUCTURED EDUCATIONAL
MODULES FOR PRIMARY SCHOOL TEACHERS ON THE
KNOWLEDGE AND SKILLS IN IDENTIFICATION OF COMMON
MENTAL HEALTH PROBLEMS IN SELECTED SCHOOLS OF
BANGALORE DISTRICT.**

THESIS

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By

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The reverence of the Lord is the beginning of all wisdom and understanding.

~Psalms 111:10

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Date:

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Place: Bangalore.

DECLARATION

I here by declare that the thesis entitled, titled “**The Effectiveness of Structured Educational Modules for Primary School Teachers on the knowledge and skills in identification of common mental health problems in selected Schools Of Bangalore District**”, is the outcome of the research work undertaken and carried out by me under the guidance and supervision of **Dr. Nagarajaiah**, Additional Professor, Department of Nursing, NIMHANS, Bangalore, Karnataka and Co-Guide, **Dr. Betty Chacko**, Professor & H.O.D. Department of Pediatric Medicine, C.S.I Kalyani Hospital, Chennai, Tamil Nadu.

I also declare that the material in this thesis has not in any way formed the basis for the award of any degree, diploma, associateship or fellowship previously of this University or any other University.

Place:

(Esther Shirley Daniel)

Date:

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ABSTRACT

INTRODUCTION

The teacher plays a significant role in the promotion of the health of the children. Teachers spend most of the school hours with children and are familiar with them. They can detect the signs and symptoms of common mental health problems at the earliest in the classroom setting. It is expected that out of 51 lakh children (6-11 years of age), approximately 5 lakh (9.8 %) children suffer from mental health problems in Karnataka. But there is no organized school mental health programme for teachers in Karnataka. There is no record of active participation of teachers in the school mental health programme in Anekal Taluk. However there are opportunistic school health programme, in Taluks. There is no full time school health nurses assigned to these schools.

NEED FOR THE STUDY

Children under 15 years of age constitute 40% of the total population. The world Health Organization had declared that one in five children in the world is challenged. It is a 'serious obstacle to a child's development'. In developed countries such as United States, prevalence rate for childhood chronic illness and disabilities has been estimated at 10%. Prevalence rate of 20 to 33% of psychiatric disorder in school children has been reported in an Indian setting. Among them learning disorders constitute 3-7 %, which includes use of listening, speaking, reading, writing, measuring or mathematical abilities .In this context, the importance of a teacher becomes vital in safeguarding and promoting the mental health of children and early identification of deviations from normal.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems in selected schools of Bangalore district.

OBJECTIVES OF THE STUDY:

- ❖ To determine the pre-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
- ❖ To administer Structured Educational Modules I and II on knowledge and skills related to identification of common mental health problems of primary school children.
- ❖ To assess the post-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
- ❖ To find out the effectiveness of Structured Educational Modules I [ST + SIM] and II [SIM] between the Experimental Groups I and II and compare with Control Group [no intervention] of the subjects in identification of common mental health problems of primary school children.
- ❖ To measure the co-relation between knowledge and skills of the subjects in identification of common mental health problems of primary school children.
- ❖ To know the association between pre-test and post-test knowledge and skills scores with the socio demographic variables of the subjects in identification of common mental health problems of primary school children.

RESEARCH HYPOTHESES:

H₁: There is a significant difference in the mean pre and post-test scores of the subjects exposed to Structured Educational Module I.

H₂: There is a significant difference in the mean pre and post-test scores of the subjects exposed to Structured Educational Module II.

H₃: There is a significant difference in the mean pre and post-test scores of the control group not exposed to intervention.

H₄: There is a significant difference in the mean pre and post-test scores between Group I and Group II who are exposed to Structured Educational Modules I and II with that of Control Group not exposed to Structured Educational Modules I or II on knowledge and skills of the subjects in identification of common mental health problems of primary school children.

H₅: There is a significant association between pre and post-test knowledge and skills scores with the socio-demographic variables of the subjects in identification of common mental health problems of primary school children.

CONCEPTUAL FRAMEWORK OF THE STUDY

The conceptual framework of the study is based on the context, input, process and product (CIPP) model of Stufflebeam.

REVIEW OF LITERATURE

The literature gathered from extensive review was classified systematically as follows in order to ensure the sequence and continuity.

Section I: Studies related to common mental health problems in Primary school children.

Section II: Studies related to the effect of school mental health programme in the management of common mental health problems in primary school children.

Section III: Studies related to knowledge and skill of teachers in the management of common mental health problems in primary school children.

Section IV: Studies related to the effect of Structured Teaching in the management of common mental health problems in primary school children.

Section V: Studies related to effect of Self Instructional Module in the management of common mental health problems in primary school children

RESEARCH METHODOLOGY

An evaluative approach and quasi experimental design with three group pre-post-test design was chosen for the study. By using probability, stratified cluster sampling, 360 Primary School teachers from government schools in Anekal Taluk of Bangalore Urban district of Karnataka State was selected to assess the effectiveness of structured teaching modules on identification of common mental health problems in primary school children. Prior permission was obtained from the relevant authorities - Deputy Director of Public Instruction (DDPI), Government of Karnataka and Block Education Officer (BEO) of the Taluk, Government of Karnataka. Tool used for the study was Self-administered Knowledge questionnaire and Rutter's Scale. The reliability of knowledge was tested by test-retest method. Data collected were edited, tabulated and analyzed using SPSS 17.0 version interpreted by using descriptive and inferential statistics based on the formulated objectives of the study.

MAJOR FINDINGS OF THE STUDY

Majority of the subjects were females, married, had TCH training, had above 6 years of teaching experience, had nuclear families, followed Hinduism, and earned between Rs.10, 000 to Rs. 15,000 per month. The statistical computations carried out

revealed that there was no significant difference between the characteristics of three groups as they were drawn from the same population

The pre-test mean of knowledge scores of Group I was 20.2(SD 1.7), Group II was 19.84 (SD 1.51) and that of Control Group was 20.23 (SD 1.81). The pre-test knowledge scores across the groups was found to be non-significant

Dimension wise pre-test knowledge score showed statistical difference in emotional disorder ($p<0.01$), developmental disorder ($p<0.01$), eating disorder ($p<0.01$), habit disorder ($p<0.01$) respectively. However conduct disorder ($p=0.46^{NS}$) and hyperkinetic disorders ($p=0.23^{NS}$) mean score levels showed non-significance

There were statistical significance in overall Post-test I & Post-test II knowledge scores across the dimensions in Group I and Group II. That there is comparison of means with the corresponding mental health disorders like emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders, the result indicates that there is increasing trend in the Groups 1 and 2 with respect to all disorders compared to control group.

It was found that years of teaching is the most contributing demographic variable on knowledge scores followed by marital duration.

The results showed that emotional and behavior disorder score were correlated and statistically significant.

“It is my aspiration that health will finally be seen not as a blessing to be wished for, but as a human right to be fought for.”

United Nations Secretary General, Kofi Annan



CHAPTER I

INTRODUCTION

Mental health is vital for individuals, families and communities, and is more than simply the absence of a mental disorder. Mental health is defined by the World Health Organization (WHO) as ‘a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.’¹

A mental disorder is an illness that affects people’s emotions, thoughts or behavior, which is out of keeping with their cultural beliefs and personality, and is producing a negative effect on their lives or the lives of their families.² There are many different types of mental disorders ranging from common disorders such as depression and anxiety to more severe ones such as schizophrenia. Effective treatments are available for people with mental disorders, and many types of mental disorder can be managed at the primary health care level with complementary support from community-based workers and community members.¹

The teacher plays a significant role in the promotion of the health of children. Teachers spend most of the school hours with children and are familiar with them. They can detect the signs and symptoms of common mental health problems at the earliest stage in the classroom setting. It is expected that out of 51 lakh children (6-11 years of age), approximately 5 lakh (9.8 %) children suffer from mental health problems in Karnataka.²

There are 46, 24,057 children in the age group of 6-11 years enrolled in 52, 023 primary schools, taught by 63,523 teachers in Karnataka. In Bangalore urban district, there are 4,86,684 children in the age group of 6-11 years enrolled in 1153 primary

schools, taught by 10673 teachers. Whereas in Anekal Taluk, 16,726 children (6-11 years old) are enrolled in 248 Government and government aided primary schools and taught by 903 teachers.²

There is no organized school mental health programme for teachers in Karnataka. There is no record of active participation of teachers in the school mental health programme in Anekal Taluk. However there are opportunistic school health programmes, in Taluks. There are no full time school health nurses assigned to these schools.³

The pupil teacher ratio of working teachers in Primary school in Bangalore urban is 1: 100 and in Anekal 1: 55.² If a “resource person” such as teacher has to play a vital role in the school health programme, he/ she should be adequately trained and equipped with adequate knowledge and skills. This will enable the nursing personnel working in the area to render their services to other needy areas also.⁴

The most common disorders seen in children and adolescents are mental retardation, emotional and behavioral disorders, and hyperactivity and learning disorders.⁵ The most recent reviews on child and adolescent mental health problems in India have found a prevalence of 2% for mild, and 0.5% for severe forms of mental retardation. Psychiatric and emotional disorders affect 13% of children between 1-16 years. In absolute terms, this means that 8-10 million children are intellectually challenged, and nearly five million other children require mental health care.⁶

Children grow into adolescence and adulthood through a process of development that depends on both intrinsic (genetic) and environmental factors. Healthy development depends on a complex interaction between nature and nurture, which leads to the fulfillment of the child's potential, and prepares them for a mature adult role.⁷

Early childhood experiences are critical in molding the abilities and temperament with which the child is born. This explains the importance of good parenting and schooling and peer interactions in the child's development.⁸

Teachers have an important role to play in relation to mental health.

They can:

- Recognize when children in their school are experiencing symptoms of a mental disorder.
- Respond appropriately to children experiencing a mental disorder.
- Refer these children for appropriate health care.
- Support children with mental disorders and their families.
- Promote mental health within their communities.⁹

1.1. NEED FOR THE STUDY

Children need nutritious food, shelter, exercise and immunization - but the basics for good mental health aren't always clear. The year 2001 has been a land mark in the development of mental health services. The WHO theme for 2001 was "Mental Health, Stop Exploitation - Dare to Care". The National Mental Health Programme initiated in 1982 has come out with a community based approach and one of its recommendations is to train teachers for balanced development of physical, mental and social faculties of school going children which is essential for a healthy life style.⁵

When one observes a child behaving in an undesirable fashion which is problematic to him and others, many questions crop up in the mind regarding its probable causes. Finding its solution becomes obligatory on the part of the significant others. The same thing happens to a teacher in an educational set up. He observes children's behavior and tries to find out the causes of variant/ errant behaviors and

directs his efforts towards modifying them. In doing so, he should not miss the important factors that might have contributed to the development of social maladjustment, emotional disturbance and behavioral problems.⁶

One in ten children suffer from a mental disorder in Karnataka; severe enough to cause some level of impairment. It is generally observed that 2/3rd of a child's life is spent in school. Next to the family, School related experiences affect the social, emotional and intellectual development of the child.⁷

Children under 15 years of age constitute 40% of the total population. The world Health Organization had declared that one in five children in the world has a handicap. It is a 'serious obstacle' to a child's development. In developed countries such as United States, prevalence rate for childhood chronic illness and disabilities has been estimated at 10%. Prevalence rate of 20 to 33% of psychiatric disorder in school children has been reported in an Indian setting. Among them learning disorders constitute 3-7 %, which includes use of listening, speaking, reading, writing, measuring or mathematical abilities.⁸

In this context, the importance of a teacher becomes vital in safeguarding and promoting the mental health of children and early identification of deviations from normal. The school is one of the most organized and powerful systems in the society, which presents an opportunity to work through it and to influence the health and wellbeing of those who come in contact with it. This is especially true in an Indian setting where there is considerable shortage in mental health facilities for children.⁹

The major constraint faced by the learning disabled appears to be the lack of proper knowledge and positive attitude exhibited by professionals within the field of education. Many teachers are having a tendency to label these children as being stupid or lazy. Such ill treatment can lead to the development of secondary emotional problem-behavioral problems, and reduction in self-esteem, and high suicide rates. Adolescents

with learning disabilities experience higher levels of trait anxiety and have higher prevalence of somatic complaints. Few studies from United Kingdom also found that the learning disabled children were more shy, seeking help and were more often the victims of bullying.¹⁰

Teachers can effectively deal with many of the problems in the area of mental health within resources available close to them. It is important to identify the disorders at an early stage by teachers provided they are trained to identify and detect those disorders.¹¹

In the light of the above and from the experience of the investigator, it was observed that it is essential to assess the knowledge and skills of the teachers in identification of common mental health problems of primary school children. Moreover it was learnt that there is a need to plan the various teaching strategies to educate the teachers, as well as to evaluate which strategy is more effective. The teaching strategies selected for the study needs to consider the economic viability, effectiveness and practicability of the programme. Two main teaching strategies were intended to be selected and used are Structured Teaching (ST) and Self Instructional Module (SIM).

1.2. STATEMENT OF THE PROBLEM

A Study to Assess the Effectiveness of Structured Educational Modules for Primary School Teachers on the Knowledge and Skills in Identification of Common Mental Health Problems in Selected Schools of Bangalore District.

1.3. OBJECTIVES OF THE STUDY

1. To determine the pre-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
2. To administer Structured Educational Modules I and II on knowledge and skills related to identification of common mental health problems of primary school children.
3. To assess the post-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
4. To find out the effectiveness of Structured Educational Modules I [ST + SIM] and II [SIM] between the Experimental Groups I and II and compare with Control Group [no intervention] of the subjects in identification of common mental health problems of primary school children.
5. To measure the co-relation between knowledge and skills of the subjects in identification of common mental health problems of primary school children.
6. To know the association between pre-test and post-test knowledge and skills scores with the socio demographic variables of the subjects in identification of common mental health problems of primary school children.

1.4. OPERATIONAL DEFINITIONS

1. **Effectiveness:** Refers to the extent to which the Primary School Teachers had gained knowledge and skill after the Educational Modules I and II on identification of common mental health problems as assessed by a structured questionnaire.

2. **Primary School Teachers:** Refers to those teachers who teach standards I to IV in Government and Government Aided Primary Schools of Anekal Taluk, Bangalore district.
3. **Knowledge:** Refers to knowledge of Primary school teachers in identification of common mental health problems of primary school children as elicited by the structured questionnaire.
4. **Common Mental Health Problem:** refers to emotional disorder (separation anxiety, phobic anxiety, sibling rivalry), conduct disorder (persistent antisocial behavior), hyper kinetic disorder (children who are restless, fidgety, chattering and interrupting people and have difficulty in concentrating or paying attention), developmental disorder (disorder of speech and language, mental retardation), eating disorder (eating non-nutritive food, and having feeding disorders) and habit disorder (thumb sucking, nail biting, picking of nose, biting parts of body, skin scratching and body rocking) seen among primary school children.
5. **Skill:** Refers to primary school teachers skills in identification of common mental health problems of primary school children as elicited by the Rutter's Scale.
6. **Structured Educational Modules:** Refers to;

Module I: Systematically planned Structured Teaching [ST] of two-hour duration on causes, detection and prevention of common mental health problems of primary school children specifically prepared for primary school teachers to enhance the knowledge and skills in identification of common mental health problems.

Module II: Self Instructional Module [SIM] specifically on causes, detection and prevention of common mental health problems of primary school children and used as structured teaching in Module I.

7. **Groups:** Refers to;

Group I: Teachers who are administered Structured Teaching plus Self Instructional Module.

Group II: Teachers who are administered Self Instructional Module only

Control Group: Teachers who are not administered any intervention.

1.5. ASSUMPTION

1. Primary school teachers will be willing to express their knowledge regarding common mental health problems in children.
2. Structured Teaching [ST] & Self Instructional Module [SIM] are accepted teaching strategies.
3. Primary school teachers lack the knowledge and skills in identifying the common mental health problems in children.

1.6. RESEARCH HYPOTHESES:

H₁: There is a significant difference in the mean pre and post-test scores of the subjects exposed to Structured Educational Module I.

H₂: There is a significant difference in the mean pre and post-test scores of the subjects exposed to Structured Educational Module II.

H₃: There is a significant difference in the mean pre and post-test scores of the control group not exposed to intervention.

H₄: There is a significant difference in the mean pre and post-test scores between Group I and Group II who are exposed to Structured Educational Modules I and II with that of Control Group not exposed to Structured Educational Modules I or

II on knowledge and skills of the subjects in identification of common mental health problems of primary school children.

H₅: There is a significant association between pre and post-test knowledge and skills scores with the socio-demographic variables of the subjects in identification of common mental health problems of primary school children.

1.7. DELIMITATIONS OF THE STUDY

The study is delimited to:

- ❖ Only selected primary school teachers from government and government aided primary school teachers working in Anekal Taluk, Bangalore district.

1.8 CONCEPTUAL FRAMEWORK OF THE STUDY

A conceptual framework is a group of concepts and a set of propositions that spells out the relationship between them. Conceptual frameworks play several interrelated roles in the progress of science. Their overall purpose is to make scientific findings meaningful and generalizable. A framework may serve as a springboard for scientific advancements.

The present study is aimed at developing and evaluating the effectiveness of structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems in selected schools of Bangalore district. The conceptual framework of the study is based on the context, input, process and product (CIPP) model of Stufflebeam. It consists of a four step model of programme evaluation developed for obtaining information for taking decisions. It provides comprehensive, systematic and continuously ongoing framework for programme evaluation.

1.8.1 Context Evaluation

It highlights the environment in which the proposed programme exists, describes the plan for decisions and collection of data apart from providing rationale for the determination of objectives.

The present study is carried out to determine the effectiveness of structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems in selected schools of Bangalore district. Based on the findings of the studies carried out in various cultural and economic contexts, it is assumed that school teachers have inadequate knowledge on emotional disorder, conduct disorder, hyper kinetic disorder, developmental disorder, eating disorder and habit disorder among children.

1.8.2 Input Evaluation

It serves as a basis for structuring decisions, it specifies resources, strategies and designs to meet programme goals and objectives. Here, in this study, input refers to:

1. Development of structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems.
2. Development of tool: Self-administered knowledge questionnaire to assess the knowledge of subjects on common mental health problems and Rutters scale was used to test the skill component of the subjects.
3. Validation of tool and Structured Teaching (ST) on selected common mental health problems
4. Establishment of reliability of tools.
5. Frame a research design.
6. Selection of sample subjects (360 teachers from 501 primary schools (Government and unaided schools) in Anekal Taluka.

7. Preparing appropriate teaching aids (Charts and PPT).

1.8.3 Process Evaluation

It depicts implementing decisions, involves identifying decisions, limitations and records its activities and events. In the present study it refers to:

1. Pilot study and activities
2. Assessing knowledge and skills of the subjects before administration of structured educational modules on the knowledge and skills in identification of common mental health problems.
3. Administration of structured educational modules I & II for primary school teachers.
4. Assessing knowledge of the subjects of the sample after one week, and after one month of administration of teaching module I & II.

1.8.4. Product Evaluation

Enables recycling of decisions as it relates to the goals and objectives of the input information and process information. In the present study it refers to:

1. Valid structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems.
2. Valid and reliable tool.
3. Structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems implemented as planned.
4. Gain in knowledge of the sample regarding knowledge and skills in identification of common mental health problems among children by statistical computation.

This step of model, further leads to recycling decisions, need for modification to terminate etc., which is not in the preview of this study.

1.8. CONCEPTUAL FRAMEWORK

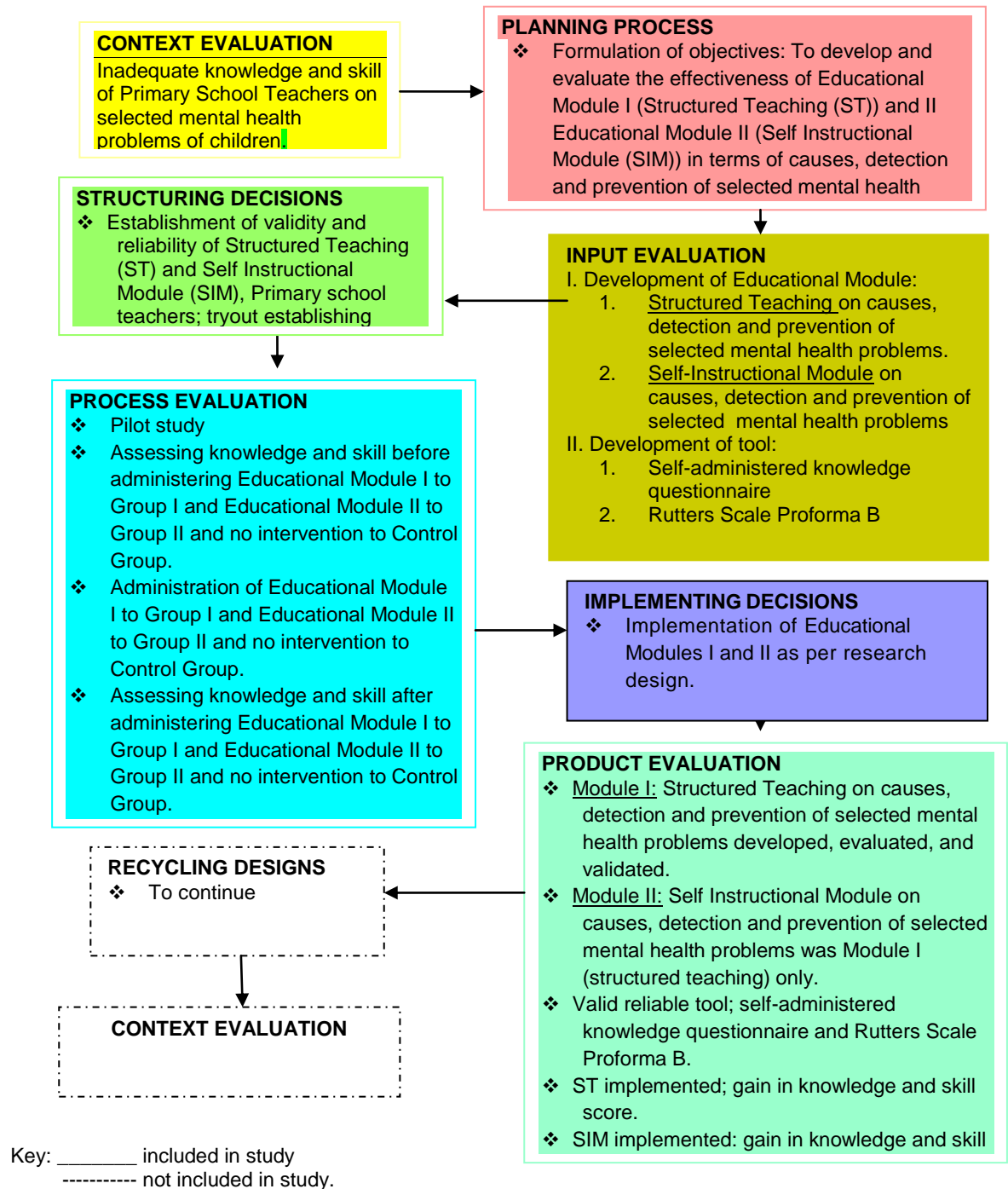


Figure 1: Conceptual model based on the evaluation model of Stufflebeam for two Educational Modules regarding causes, detection and prevention of common mental health problems.

“Somewhere, something incredible is waiting to be known.”

Dr. Carl Sagan



CHAPTER II

REVIEW OF LITERATURE

This chapter gives an account of the literature reviewed by the investigator for the purpose of assessing the effectiveness of Structured Educational Modules for primary school teachers on the knowledge and skills in identification of common mental health problems in selected schools of Bangalore District.

Research is systematic inquiry that uses disciplined methods to answer questions or solve problems. The ultimate goal of research is to develop, refine and expand a body of knowledge.

Nursing research is systematic inquiry designed to develop trustworthy evidence about issues of importance to the nursing profession including nursing practice, education, administration and informatics.

Clinical or field nursing research is designed to guide nursing practice and improve the health and quality of life of individual, family and community.

A review of related literature is an essential aspect of scientific research. It involves the systematic identification, location, scrutiny and summary of written material that contain information on the research problems.

Conducting a review of literature is a challenging and enlightening experience. Through a literature review, the researcher generates what is known about a particular situation and the knowledge gap that exists between the statement and reality, which lays a foundation for the research plan

A literature review was based on an extensive survey of books and regional, national and international journals of Nursing

Nursing research is a process in which the knowledge gained from earlier studies helps to integrate into the present study in general. One of the most satisfying aspects of the literature review is gaining new knowledge and developing the insight into the content in order to develop a general conclusion for the present study. A researcher analyses existing knowledge before developing a new area of study.

Related literature of both research and non-research work has helped researcher to explore, broaden and understand, as well as gain an insight into the selected problem undertaken. Therefore the investigator probed into accessible sources and gained an indepth understanding from the related studies. A review of literature relevant to the study was undertaken, which helped the researcher to develop a deep insight into the problem and gain information on what had been done in the past. The investigator for the study did an extensive review.

The literature gathered from this extensive review was classified systematically as follows, in order to ensure the sequence and continuity.

Section I: Studies related to common mental health problems in Primary school children.

Section II: Studies related to effect of school mental health programme in the management of common mental health problems in primary school children.

Section III: Studies related to knowledge and skill of teachers in the management of common mental health problems in primary school children.

Section IV: Studies related to effect of Structured Teaching in the management of common mental health problems in primary school children.

Section V: Studies related to effect of Self Instructional Module in the management of common mental health problems in primary school children

Section I: Studies related to common mental health problems in Primary school children

A cross sectional study was conducted in Rakai District, Uganda to investigate and compare the emotional and behavioral problems of orphans and non-orphans, and to suggest interventions. Two hundred and ten primary school going orphans and non-orphans were randomly selected using quantitative and qualitative methods employing standardized questionnaires, Focus Group discussions and selected Key Informant interviews. All children were administered Rutter's Children's Teacher Administered Behavior Questionnaire to measure psychological distress and a modified version of Cooper's Self-Report Measure for Social Adjustment. The results showed that both orphans and non-orphans had high levels of psychological distress as measured using Rutter's questionnaire but with no significant statistical difference between the two groups. Psychological distress was associated with poor academic performance in both groups. More orphans than non-orphans had more common emotional and behavioral problems. 8.3% orphans compared to 5.1 % of the non-orphans reported having had past suicidal wishes and more reported past forced sex / abuse. Yet orphans were more likely to be emotionally needy, insecure, poor, exploited, abused or neglected.¹²

A study was conducted among urban primary school children in Dhaka, Bangladesh, to examine the prevalence of behavior disorders and their relation to age, gender, and gender segregation. A total of 1288 school children in grades 1 to 5 were screened for possible behavior disorders and the Rutter B2 scale was used to determine their prevalence and associations. The study revealed that 13.4% of the population displayed some type of behavior disorder; males were twice as commonly affected as females. Emotional (3.2%), conduct (8.9%), and undifferentiated disorders (1.2%) were noted; all were more prevalent in males than in females. Multivariate logistic regression analysis showed a significant relationship with male gender and higher grades for

conduct disorder and all disorders combined. None of the three independent variables showed a positive correlation with emotional disorder. The high prevalence of mental disorders among primary school children in the country exemplifies the need for a mental health program for the children including screening, full evaluation, and expert care. Surveys reported that the data on the prevalence and correlates of behavior disorders in children are scanty or absent in many countries including Bangladesh.¹³

A study was conducted in central Al Ain city, Abu Dhabi, United Arab Emirates to estimate the prevalence of behavior disorders and to determine whether and how these were associated with the age, gender, nationality, grade and scholastic performance of the children among primary school children. A multi-stage random sampling technique was adopted to select the samples. Screening was done using the Rutter B2 Scale. 2100 boys and girls aged between 5.4 and 16.6 years, 13.5% showed some form of behavior disorder. The overall prevalence of disorders was significantly higher in boys than in girls (16.3% v 10.2%). Emotional, conduct and undifferentiated disorders were noted in 4.8%, 6.9% and 1.8% of all children, respectively. Conduct disorder was significantly commoner in boys than in girls (9.3% v 4.1%). In multivariate logistic regression analyses, different disorders were significantly associated with gender and/or grade and/or scholastic performance with the odds being the lowest in girls, in children in grades 3 to 6, and in children with excellent or very good scholastic performance. Nationality was not significantly associated with behavior disorders in the children studied. A considerable proportion of young children in Al Ain manifest signs of behavior disorders in primary school. Primary school children in Al Ain and comparable areas should be screened for behavior disorders, and those found positive by screening tests should be assessed by health professionals to confirm the presence or absence of behavior disorders which need expert care.¹⁴

A longitudinal study is going on in the Southern part of the Netherlands. This study aims to investigate the usefulness of screening for anxiety disorders by children's self-report of anxiety symptoms on a questionnaire (SCARED-71) in primary school settings. The participants were Children aged 8–13, who were recruited via primary schools in rural and urban schools. Of the selected children, 183 high-anxious children and their parents, and 80 medium-anxious children and their parents took part in a diagnostic interview, the Anxiety Disorder Interview Schedule (ADIS) of the high-anxious children, 60% had an anxiety disorder versus 23% of the medium-anxious children, whereas groups did not differ on rates of dysthymia/depression and attention deficit hyperactivity disorder. The diagnoses: separation anxiety disorder, social phobia and specific phobia were specifically predicted by the corresponding subscales of the screening questionnaire.¹⁵

A study was conducted in rural Bangladesh to determine the prevalence of child behavior problems reported by parents in “Child Development and Neurology unit”. Sample size of total 4003 children aged 2-9 years was selected. The result shows that 2231 children parents reported the behavioral impairment. Hence the study concludes the importance of public health planning and delivery of health service to the primary school children.¹⁶

A study was conducted to assess the prevalence of tic disorders among primary school children in the Department of Child Neurology and Psychiatry. A sample size of 2347 primary school children was selected. The study resulted in the conclusion that a total 68 children (56 boys, 12 girls) aged 6-11 years were identified with tic disorders. The prevalence was 4.4% in boys and 1.1% in girls. A significant correlation was found between the presence of tic disorders and impaired school performance.¹⁷

A study was conducted in a primary school in UK to find out the relationship between behavioral problems and academic attainment. 364 school children aged 8 to

11 years was assessed on a range of cognitive ability tasks. These assessments included standardized tests of reading, arithmetic and verbal and non-verbal intelligence. Under achievement was assessed using different criteria. To assess behavior, teacher completed the strengths and difficulties questionnaire (R-Good-man, 1997) for each participating child and found that significant relationship between behavior and academic attainment and prosocial behavior was positively correlated with reading and arithmetic. The hyperactivity and conduct problems were negatively correlated. This association was especially strong in the children rated by the questionnaire as hyperactive, where around 1 in 5 had a specific reading deficit.¹⁸

A prevalence study was conducted regarding Psychiatric morbidity among Indian primary rural school children. Total 460 children were screened with the use of Rutter-B-Scale. Results showed that the overall prevalence was 33.3 percent. Conduct disorder was found to be the commonest diagnostic category with a prevalence rate of 13.5%. This was followed by mental retardation with a rate of 5.4%, enuresis 4%, simple disturbance of activity and attention 3.1%, and relationship problem 2.7%. In all age groups, males outnumbered females but the relative proportions were almost the same in each of them. Morbidity was higher in males (41.9%) than females (19.8%) and this difference was statistically significant. Conduct disorder was the commonest (40%) followed by mental retardation (16%) and enuresis (12%).¹⁹

A study was conducted among urban middle-class, urban slum and rural area children. The aim of the study was to screen the mental health problems. There were 2064 children aged 0-16 years. They were selected by stratified random sampling. The results indicated a prevalence rate of 12.5 per cent among children aged 0-16 years. There were no significant differences among prevalence rates in urban middle class, slum and rural areas. The prevalence rate in the 4-16 year old children was 12.0 percent. Enuresis, specific phobia, hyperkinetic disorders, stuttering and oppositional

defiant disorder were the most frequent diagnoses. When impairment associated with the disorder was assessed, significant disability was found in 5.3 per cent of the 4-16 year group. Assessment of “felt treatment needs” indicated that only 37.5 per cent of the families perceived that their children had any problem. Physical abuse and parental mental disorder were significantly associated with psychiatric disorders. Prevalence rates of psychiatric morbidity in 0-16 year old children in India were found to be lower than Western figures. Middle class urban areas had highest prevalence rates and urban slum areas had the lowest prevalence rates.²⁰

A cross sectional observation study was carried out in primary school children of slum dwelling area. The aim of the study was to find out morbidity in habit disorders and common behavior problems. So that early detection would be helpful to correct them to prevent it from further personality maladjustment. Total sample size of the study was 454 in age group of 6-10 years. Among them 251 (55.3%) were male and 203 (44.7%) were female. Out of the 454 children 55 (12.1%) were having the habit of nail biting, 35(7.7%) children had the habit of thumb sucking, 27 (6.0%) children had the problem of bed wetting, 7 (1.5%) children had the habit of food fad, 16 (3.2%) children had the habit of temper tantrum and 314 (69.2%) children had none of these problems. There was no statistical difference in gender wise habit disorders. Teachers should be taken into consideration for training and initial assessment and follow up regularly. They have to play a vital role to change their habits by the reward and reinforcement method.²¹

A cross sectional survey of school children aged 5 to 11 years of certain towns within metropolitan area was done. Seven private and eight community schools agreed to participate. 1488 consent forms were sent to 700 parents of private school and 788 parents of community school children. A total of 675 parents agreed to participate in the study. The response rate was 45.3%. Assessment of children's mental health was conducted using Strength and Difficulties Questionnaire (SDQ). Parents rated 34.4% of

children as falling under the “abnormal categories on SDQ. Slightly higher estimates (35.8%) were reported by the teacher. The findings suggest a striking difference between the informants’ ratings as well as gender wise difference in prevalence of common child mental health problems. In the present study prevalence of child mental health problems was higher than reported in studies from other countries. There was also a gender difference in prevalence; boys had higher estimates of behavior/externalizing problems, whereas emotional problems were more common amongst females. The study concluded there is a need for developing programs to train, sensitize and mobilize teachers and parents regarding child’s psychological, emotional and behavioral problems.²²

A study has found that in a group of 50 children selected from 1st to 4th standard, majority of the children had scholastics backwardness. Thus it constituted more as a common problem in both 6 year and 10 years old children. The main cause for scholastic backwardness was found to be faulty parental attitude, poor motivation for studies, fear of school activities and teacher, isolation among friends, rejection by teachers and difficulties in school subjects.²³

A study was conducted in 8 inner London primary schools on audit of a school-based counseling provision for emotional and behavioral difficulties in primary school children. The total sample size was 540 children. This study presents a case note audit of children attending an innovative programme for counseling and therapy in school-based centers. This represented 22.4% of all children attending the schools, with an average age at referral of 8.1 years. 53.8% of boys compared to 46.2% girls. The majority of the children spoke English at home (86%) and the only significant differences according to home language related to concern over social interactions. Comparisons between children cared for by both parents (48%) and those cared for by a single parent (37.3%) showed the latter group to have higher distress and concerns, thus affecting

school work, home situation, stress for significant life events and lowered coping. Attendance and defaulting rates were good, with no significant differences among those who attended regularly. Many of the concerns surrounded self-esteem and social / family factors. The level of distress was significantly lowered after counseling ($t = 17.5$ $p < .001$) 51.45 of the children experienced significant life events which preceded theft referral, 30.9% triggered the referral and 45.6% during the course of counseling. Distress caused by life events was generally high with coping levels moving down after multiple exposures. The data is discussed in the light of future provision of care for children.²⁴

A cross sectional study was conducted in Nigeria. The aim of the study was to assess the children's knowledge and attitudes to mental health and illness. Survey was based on a questionnaire previously used in the UK and adapted in Nigeria. The sample size was 145. It was found that children showed little knowledge of, negative attitudes and social distance towards persons with mental health problems. Urban participants and boys appeared less knowledgeable than rural children and girls. Further the study concluded that Nigerian school children, as with Nigerian adults and young people in Western countries, show stigma towards mental illness. This may be underpinned by a lack of knowledge regarding mental health problems. Educational interventions need to be appropriate to area, age and gender to effectively improve mental health literacy, which in turn will influence attitudes and social distance. However, the fact that the schoolchildren were optimistic about recovery is a strength that could be built upon.²⁵

A four-year longitudinal study published on prognosis and continuity of child mental health problems from preschool to primary school, changes and continuity of behavioral and emotional problems were examined. The sample size was 81 subjects from kindergarten to primary school. Mental health problems were assessed by means of the Child Behavior Checklist (CBCL). The distribution of the CBCL broadband groups

revealed a high level of continuity of internalizing symptoms over the four-year period and a shift from externalizing symptoms at baseline towards a combination of internalizing and externalizing symptoms at follow-up. The presence of mental health problems at follow-up was correlated with gender (higher amongst boys), pre-existing mental health problems at baseline, and separation or divorce of the parents, but not with single-family status or the age and educational level of the mother. The increasing number of children with a combination of internalizing and externalizing symptoms demonstrates the increasing complexity of child mental health problems in the developmental span from preschool age to school age.²⁶

A study carried out to assess the psychiatric symptoms in primary school. Representative sample of 1,481 children was selected from the primary school. The assessment was done by using the Child Behavior Checklist (CBCL). The major findings revealed that 18% of children had mental health problems. 27.3% had exclusively internalizing symptoms, 6.0% had externalizing symptoms and 52.4% had a combination of symptoms of internalizing and externalizing symptoms. The study concluded that increasing prevalence was associated with an increase of symptoms of the broadband groups internalizing and combined but not externalizing. The results also highlighted an age and gender specific vulnerability of boys, both at preschool and primary school.²⁷

A study was conducted to assess the mental health problems in Arab children. Strengths and difficulties questionnaire was applied among children living in the Gaza strip. Children were selected in four age bands, i.e. 3, 6, 11 and 16 years of age. The relevant forms of the Strengths and Difficulties Questionnaire (SDQ) were completed by parents, teachers and children. The major findings of the study revealed that higher rates of children had emotional and conduct problems.²⁸

This article describes the processes and findings of a systematic review of research into the effectiveness of strategies to support pupils with emotional and

behavioural difficulties (EBD) in mainstream primary schools. A search for studies carried out from 1975–1999 resulted in 265 citations, of which 96 were found to be within the scope of the review topic. Of these, 27 reported on 28 research studies, which could address the review question. Findings from these 28 studies indicated that a number of strategies, based on a range of theoretical frameworks, showed some positive impacts on pupil behaviour. However, the review highlighted a dearth of good quality research on strategy effectiveness. There is a need for higher quality research into strategies currently being used in schools. Practitioners, parents and children should all be involved in setting the parameters for interventions and research concerned with EBD.²⁹

A study was conducted to provide a comprehensive investigation of the retrospective correlates of loss of control over eating in children close to the onset of their first LOC eating episodes. A community-based, case-control design was used to compare matched groups of 60 children with and without LOC eating. Retrospective correlates were assessed using a child-adapted version of the Oxford Risk Factor Interview. Children with LOC eating revealed greater levels of exposure to parental problems, (e.g., underinvolvement, arguments, and depression of family members) and dieting-related risk factors than children without LOC eating. Predictors of LOC eating were risk correlates parental underinvolvement, and critical comments by the family and the critical life event change of school. Results underline the influence of parental behavior and the impact of dieting behavior on the development of non-normative eating in middle childhood.³⁰

Binge eating is common in middle childhood (6-12 years) and often presents in concert with disordered eating attitudes, emotional distress, overweight and adiposity. Binge eating is also predictive of excessive weight gain and is associated with energy intake. However, few children meet DSM-IV-TR criteria for binge eating disorder, thereby making treatment recommendations a challenge. Criteria for a new diagnosis were laid

down for loss of control eating disorder in children age 12 years and younger, for further study. Provisional binge eating disorder research criteria for children 14 years and younger, and are based upon the evolving literature in children with binge and loss of control eating episodes. A rationale for the new criteria set is provided, and future research directions are proposed.³¹

A cross sectional study was conducted in the state of Minas Gerais, Brazil, to determine the prevalence of possible eating disorders and inappropriate eating behaviors of school children from six municipalities. The participants were 1,807 public school students with ages ranging from 7 to 19 years. The Bulimic Investigatory Test of Edinburgh (BITE), Eating Attitude Test (EAT), and Body Image Test were applied. According to the EAT, 241 students (13.3%), mostly females, had inappropriate eating behaviors. Nineteen students (1.1%) had a BITE score indicating a possible diagnosis of bulimia nervosa. It was found that 1,059 students (59%) were unhappy with their body image; 731 students (40%) were on a diet; and 1,014 (56%) exercised to lose weight. In addition, 218 students (12%) presented binge-eating habits and 175 students (10%) used purgative methods to control weight. It was observed that there was a high prevalence of possible eating disorders and inappropriate eating behavior in the study population, especially among female adolescents. These results are similar to those reported from developed countries. The present findings are relevant for the care of children and adolescents and can serve as the basis for future works aimed at increasing our understanding of the risk factors for these illnesses.³²

An epidemiological study was conducted in urban and rural areas of Bangalore, regarding child and adolescent psychiatric disorders. Total participants were 2064 children aged between 0-16 years using stratified random sampling. The screening stage was followed by a detailed evaluation stage. The major findings of the study were prevalence rate of 12.5 per cent among children aged 0-16 years. There were no

significant differences among prevalence rates in urban middle class, slum and rural areas. The psychiatric morbidity among 0-3 year old children was 13.8 per cent with the most common diagnoses being breath holding spells, pica, behavior disorder NOS, expressive language disorder and mental retardation. The prevalence rate in the 4-16 year old children was 12.0 per cent. Enuresis, specific phobia, hyperkinetic disorders, stuttering and oppositional defiant disorder were the most frequent diagnoses. When impairment associated with the disorder was assessed, significant disability was found in 5.3 per cent of the 4-16 year group. Assessment of felt treatment needs indicated that only 37.5 per cent of the families perceived that their children had any problem. Physical abuse and parental mental disorder were significantly associated with psychiatric disorders. Further the study concluded that prevalence rates of psychiatric morbidity in 0-16 year old children in India were found to be lower than Western figures. Middle class urban areas had highest and urban slum areas had lowest prevalence rates. The implications for clinical training, practice and policy initiatives are discussed.³³

A report has revealed that a child of three is among hundreds of youngsters receiving hospital treatment for eating disorders. Dr Malcolm Bourne, a child psychiatrist at East Lancashire Hospitals NHS Trust, said doctors only see one-in-five children who are suffering from eating disorders. The report published showed 125 children under 18 have been treated for eating disorders by the East Lancashire Child and Adolescent Service (ELCAS) since 2007. The majority of those helped – 109, were aged 12 to 16. But many were under 10, including the three-year-old, who was treated earlier this year. A total of 102 young girls were treated for eating disorders, compared to 23 boys. The majority suffered from anorexia or bulimia. The findings echo figures published which showed 600 children under 13 were referred to hospitals with eating disorders since 2009. According to statistics released from 35 hospitals in response to a freedom of information request, 197 were aged from five to nine and 400 between 10 to 12. Some

hospitals refused to release information, suggesting that these shocking figures may themselves be an underestimate. Half of people with eating disorders develop the condition at primary school, according to a new survey. More than half of anorexia sufferers develop their eating disorder by the age of ten. 29% were 11 to 15 when their anorexia began.³⁴

A study was done on Chinese primary school children to determine levels of behavior problems and to explore key determinants relevant in the Chinese context. The investigator examined 2,203 child-parent pairs and administered a child self-completion questionnaire to children aged 7-13 and Rutter Parent Scales to their parents in nine primary schools. Results showed that 13.2% of the children (16.4% of boys, 9.4% of girls) had a behavior problem. Girls manifest more emotional problems (5.3 vs. 2.3%) and boys more conduct problems.³⁵

A cross sectional study was conducted in selected private and community schools to find out screening for emotional and behavioral problems among 5-11 year old children in Karachi, Pakistan with the active participation of parents. The study was based on SDQ by parents based on cut-off provided by Goodman. The study concluded children attending private schools are more likely to be normal as compared to community school children.³⁶

A cross sectional observation study was carried out in primary school children of slum dwelling area of Kathmandu Valley which included 454 students. The aim of study was to find out morbidity in habit disorders in age group of 6-10 years so that early detection will be helpful to correct them to prevent them from developing further personality maladjustment. There was no statistical difference in gender wise habit disorders. The morbidity is due to multiple factors of physical social environment.³⁷

A cross sectional study was conducted to determine emotional and behavioral problems among school going children in Pakistan. A survey of school children of certain

towns within Karachi metropolitan area was done. 1488 consent forms were sent to 700 parents of private schools and 788 to parents of community school children. A total of 675 parents agreed to participate in the study. The samples were aged between 5 to 11 years during 1st half of 2006. SDQ was filled out by parents and school teachers for the same children. Demographic data of parents, teachers and children were also collected using a separate Proforma. Seven private and eight community schools agreed to participate. The response rate was 45.3%. Assessment of children's mental health was conducted using Strength and Difficulties Questionnaire (SDQ). Parents rated 34.4% of children as falling under the "abnormal category on SDQ, slightly higher estimates (35.8%) were reported by the teacher. The findings suggest a striking difference between the informants' ratings as well as gender wise difference in prevalence of common child mental health problems. Hence it is concluded that the prevalence of child mental health problems was higher than reported in studies from other countries. There was also a gender difference in prevalence; boys had higher estimates of behavior/externalizing problems, whereas emotional problems were more common amongst females. There is a need for developing programs to train, sensitize and mobilize teachers and parents regarding child's psychological, emotional and behavioral problems.³⁸

This prevalence survey was conducted in UK. The aim is to determine whether children attending general pediatric outpatient clinics are at increased risk of suffering from emotional and behavioral disturbance. Participants were 307 children aged 5-15 years attending a representative sample of pediatric out-patient clinics. A national community sample of 10,438 children aged 5-15 years was used as a comparison group. Parental ratings of child behavior were obtained using the Strengths and Difficulties Questionnaire (SDQ). Out of 60 (20%) children with a probable psychiatric disorder only 15 had received specialist help from Child Mental Health Services. There

were no gender differences in the profile of difficulties with emotional symptoms being particularly evident in both boys and girls. Hence it was concluded that there is an increased prevalence of emotional and behavioral disturbance in children attending pediatric outpatient clinics.³⁹

A study was conducted in Shiraz, Iran. It aimed to evaluate onychophagia or nail biting (NB) prevalence and its association with mental health of a community sample of children. Participants were the parents of 743 primary school children, selected by random sampling, who reported NB behavior of their children and themselves. Children's mental health problem was assessed using the Strengths and Difficulties Questionnaire (SDQ). 22.3% of children had NB behavior in the last three months, girls: 20.1% and the rate in boys was 24.4%. 36.8% of the children with NB had at least one family member with nail biting. Hence it was concluded that NB is a very common behavior in both genders in children and their family members.⁴⁰

This study was to investigate the prevalence of co-morbid psychiatric disorders in a clinical sample of children with NB. A consecutive sample of 450 referred children was examined for NB and 63 (14%) were found to have NB. The children with nail biting habits and their parents were interviewed according to DSM-IV diagnostic criteria. They were also asked about lip biting, head banging, skin biting, and hair pulling behaviors. Results from a child and mental health clinic revealed that nail biting is common amongst children and adolescents. These children had been referred to the clinic. The most common co-morbid psychiatric disorders in these children were attention deficit hyperactivity disorder (74.6%), oppositional defiant disorder (36%), separation anxiety disorder (20.6%), enuresis (15.6%), tic disorder (12.7%) and obsessive compulsive disorder (11.1%). The rates of major depressive disorder, mental retardation, and pervasive developmental disorder were 6.7%, 9.5%, 3.2%, respectively. There was no association between the age of onset of nail biting and the

co-morbid psychiatric disorder. Severity and frequency of NB were not associated with any co-morbid psychiatric disorder. About 56.8% of the mothers and 45.9% of the fathers were suffering from at least one psychiatric disorder. The most common psychiatric disorder found in these parents was major depression. The rate of nail-biting in USA preschool children, aged 3 to 6 years, has been as 23%. In an epidemiological study on 4590 school children in India, the rate of NB was reported as 12.7%. A review article reported that up to 33% of children aged 7 to 10 years and 45% of adolescents are nail biters. Another epidemiological study on 5554 children aged 5–13 year old in India showed that girls were more frequently thumb sucking than boys . The rate of NB decreases with the increase in age.⁴¹

A study was conducted in 2006 on prevalence of conduct disorder in school children of Kanke, Ranchi, and Jharkhand. A total of 240 students, selected by stratified random sampling, participants were subjected to the Schedule for Affective Disorders and Schizophrenia for School Age Children: Present and Lifetime Version (K-SADS-PL) screening interview. Nineteen students who qualified were subjected to conduct disorder and ADHD supplement of K-SADS-PL with additional information from parents. Conduct disorder was found in 4.58%; the ratio of boys to girls being 4.5:1. Childhood onset was found in 73% and adolescent onset in 27%. Mild conduct disorder was found in 36%, moderate in 64% and severe conduct disorder in none. Co morbid ADHD was found in 36%, hyperactive-impulsive being predominant. Significant difference was found in temperament between students with and without conduct disorder with difficult temperament predominating in the former, and easy in the latter. Lying, bullying and cruelty to animals were most frequent symptoms.⁴²

An epidemiological study was conducted in 1989 on behavior problems in school children in urban areas of Beijing. A total of 2432 primary school children,

aged 7-14 years, in urban areas of Beijing, were evaluated with the Children's Behaviour Questionnaire developed by Rutter. The frequency of behavior problems in primary school was 8.3%-7.4% antisocial behavior and 0.62% neurotic behavior. Behaviour problems were higher in boys than girls. Antisocial behavior was dominant in boys, while neurotic behavior was common in girls. The frequency of behavior problems varied significantly with the different social environments in which the children were brought up, but were not different between one-child families and those with more children.⁴³

A study was conducted and published in 2006 Department of Psychiatry, University of Wisconsin School of Medicine on Public screening procedures to accurately identify children with problems unlikely to remit and thus, in need of intervention, is of major public health concern. This study aimed to develop a universal school-based screening procedure Mothers and teachers reported on a community sample (N = 328) of children's internalizing and externalizing symptoms in kindergarten and grades 1, 3, and 5. In grade 5, teachers reported on children's school-based functional impairments, physical health problems, and service use; mothers reported on children's specialty mental health care. The results shows that four patterns distinguished children who (1) never evidenced symptoms; (2) evidenced only isolated symptoms; or evidenced recurrent symptoms, either (3) without or (4) with co morbid internalizing and externalizing. By grade 5, children with recurrent co morbid symptoms had the greatest impairments, physical health problems, and service use. These children can be identified quite accurately by grade.⁴⁴

A study was conducted in Iran 2008, for finding the association between nail biting and psychiatry disorder, it was shown that Nail biting is common amongst children and adolescents who were referred to a child and adolescent mental health

clinic. The most common co-morbid positional defiant disorder (36%), separation anxiety disorder (20.6%), enuresis (15.6%), tic disorder (12.7%) and obsessive compulsive disorder (11.1%). The rates of major depressive disorder, mental retardation, and pervasive developmental disorder were 6.7%, 9.5%, 3.2%, respectively. There was no association between the age of onset of nail biting and the co-morbid psychiatric disorder. Severity and frequency of NB were not associated with any co-morbid psychiatric disorder.⁴⁵

An epidemiological study was conducted on emotional and behavioral problems of primary children in Japan. 1860 primary school children, aged from 6 to 12 years, from urban suburban and rural areas in Japan were assessed by their school teachers according to the Rutter scale. The prevalence of children with deviant scores in the general population was 3% and this figure was lower than that for any other country assessed by the same scale. Eighty-four percent of the deviants were of an antisocial type but only 7% were neurotic. The ratio of antisocial to neurotic was higher than those from other countries. The prevalence of children with deviant scores was higher in boys than in girls and also higher in early and middle school years than in late school years. Area, family occupation, sib ship size, birth order and one-parent family had only limited effects on the deviant behavior of the children.⁴⁶

Epidemiological studies suggest that the prevalence of conduct disorder in children between the ages of 5 and 10 years is 1.7% for boys and 0.6% for girls. A prevalence study showed that conduct disorder in 5–10-year-olds to be 4.8% for boys and 2.1% for girls. Although symptoms are generally similar in each gender, boys may have more confrontational behaviour and more persistent symptoms. There are also differences regarding gender in relation to the age of onset of conduct disorders. In another study it was found that the median age of onset for children referred to mental health clinics with antisocial behaviour was in the 8–10-year age range. Fifty-seven per

cent of boys had an onset before the age of 10 years, whereas for girls the onset was mainly between 14 and 16 years of age.⁴⁷

The aim of this research was to investigate conduct disorder among pupils of primary schools in Khartoum, the capital of Sudan. School survey descriptive method was used and 384 pupils were selected from primary schools through systematic sampling technique. Ages ranged from 5 to 17 years old with a mean of (9.34) years. The tools of data collection consisted of the Sutter Eyberg Student Behavior Inventory. The statistical tests used to analyze the collected data involved frequency and percentage, Pearson coefficient of correlation, mean, t-test for one sample and t-test for two independent samples. The results of this research revealed that the prevalence of conduct disorder among pupils of primary schools in Khartoum was high. There were significant differences in conduct disorder between male and female pupils. There were no significant differences between pupils of preparatory classes and pupils of elementary classes. There was no significant correlation between conduct disorder and age.⁴⁸

A descriptive study was conducted in Mumbai, January 2007 and 2008. The aim of the study was to identify co morbidity, aggression, hostility and severity across the subtypes of conduct disorder based on the age of onset as per the DSM-IV criteria. This study was carried out in a private psychiatric clinic. Children aged between 7-16 years old were clinically assessed using clinical interviewing to determine co morbid psychiatric diagnoses. The Modified Overt Aggression Scale (MOAS), Buss Durkee Hostility Inventory (BDHI), Clinical Global Impressions Scale (CGI) and Clinical Global Assessment Scale (CGAS) were used in quantitative assessment. Parental psychiatric diagnosis was ascertained via clinical interview. Results revealed that childhood onset conduct disorder was associated with greater rates of ADHD, anxiety disorders, complex co morbidity and higher perceived hostility scores.⁴⁹

There have been wide discrepancies in the prevalence of tic disorder and much of this has been due to the use of different assessment methods. Two studies using precise measures are contributing to the narrowing of prevalence range. Wright and Sugden (1996) advocated a two-step approach to assessment using the Movement Assessment Battery for Children (Movement ABC-2, Henderson & Sugden, 2007) as the standardized measure for motor impairment and the Movement ABC Checklist as a guide to examining the effects of motor difficulties on daily living. Using this methodology, it was found that the prevalence figure was 4-5% in mainstream primary schools. More recently, the large U.K. based population study, the Avon Longitudinal Study of Parents and Children (ALSPAC) has shown a prevalence of 1.7% with a further 3.2% of children considered as having "probable Developmental Coordination Disorder" in the case of broader cut-offs for coordination testing and activities of daily living (Lingam et al, 2009). Gender differences have been examined on numerous occasions, with the consensus being that the condition is more prevalent in boys than girls, with estimates ranging from a small gender difference to three or four to one. However numbers identified may be related to a gender bias in the assessment tools used. Teacher perception of skills among boys and girls may also influence identification.⁵⁰

A study was conducted in Pondicherry, India to find out the prevalence of mental disorders in school-age children attending a general pediatric department. Out of 313 children of age 5, 101 were found to have a mental disorder according to DSM-III-R criteria; the remaining had organic disorders. Children above 8 years (74%) registered higher morbidity. There was no sex difference in overall morbidity. Mental disorders were significantly related to urban background, middle-class socioeconomic status and literate parents, compared with age and sex-matched controls. There was no significant relationship with the type of family and number of siblings. Conversion disorder (31%) was the commonest, followed by conduct disorders (16%).⁵¹

A study was conducted to assess the relative factors in behavioural disorders of students in Rasht Primary schools students. For this reason 750 boys and girls students (375 girls and 375 boys) selected by multi-phase cluster sampling and evaluated by ruter behavioural disorders questionnaire that is form specific to teachers. Design is comparative causal; researcher's principal purpose in this research was to find a relation between behavioural disorders and Academic Achievement, social class, family income, parent education and their sex. Results of research denoted that family income has meaningful effects on all behavioural disorders or in other words low family income has more effects on anxiety and conduct disorder, hyperactivity and maladjustment. Results also show that low social class has meaningful effects on behavioural disorders prevalence in students. The behavioural disorders in two groups of boys and girls are meaningful differences.⁵²

Research literature relating to the prevalence of attention-deficit/hyperactivity disorder (ADHD) and co-occurring conditions in children from primary care settings and the general population is reviewed as the basis of the American Academy of Pediatrics clinical practice guideline for the assessment and diagnosis of ADHD. Epidemiologic studies revealed prevalence rates generally ranging from 4% to 12% in the general population of 6 to 12 year olds. Similar or slightly lower rates of ADHD were revealed in pediatric primary care settings. Other behavioral, emotional, and learning problems significantly co-occurred with ADHD. Also reviewed were rating scales and medical tests that could be employed in evaluating ADHD. The utility of using both parent- and teacher-completed rating scales that specifically assess symptoms of ADHD in the diagnostic process was supported. Recommendations were made regarding the assessment of children with suspected ADHD in the pediatric primary care setting.⁵³

A study was conducted to find out the prevalence of conduct disorder and its DSM-IV subtypes and co morbid attention deficit hyperactivity disorder (ADHD) in 4

schools of Kanke block among students of classes V to X. A total of 240 students, selected by stratified random sampling, one of the most frequently diagnosed psychiatric conditions in children, who vary widely from 0.2% to 8.7%., were subjected to the Schedule for Affective Disorders and Schizophrenia for School Age Children: Present and Lifetime Version (K-SADS-PL) screening interview. Nineteen students who qualified were subjected to conduct disorder and ADHD supplement of K-SADS-PL with additional information from parents. Results revealed that conduct disorder was found in 4.58%; the ratio of boys to girls being 4.5:1. Childhood onset was found in 73% and adolescent onset in 27%. Mild conduct disorder was found in 36%, moderate in 64% and severe conduct disorder in none. Co morbid ADHD was found in 36%, hyperactive-impulsive being predominant. Significant difference was found in temperament between students with and without conduct disorder with difficult temperament predominating in the former and easy in the latter ($p=0.004$). Lying, bullying and cruelty to animals were most frequent symptoms. The prevalence of conduct disorder was 4.58%, more common in boys, the majority had childhood onset, and one-third had co morbid ADHD.⁵⁴

A study was conducted in Dammam city, Saudi Arabia. The aim of the present study was to determine the prevalence of Attention Deficit Hyperactivity Disorder and associated family and psychosocial factors among male primary school children. A sample size of 1287 students aged 6-13 years in 67 government and 10 private primary schools was selected by multistage systematic random sampling. Data was collected using two types of questionnaires: the modified Arabic version of the Attention Deficit Disorders Evaluation Scale (ADDES) school version, and Parents' questionnaire to diagnose the three main subtypes of Attention Deficit Hyperactivity Disorder namely: inattention, hyperactivity-impulsivity, and combined Attention Deficit Hyperactivity Disorder. The majority of the boys from government schools (83.0%), were of age 6-<9

years (40.5%) and of Saudi nationality (80.7%). The overall prevalence of combined Attention Deficit Hyperactivity Disorder was 16.4%, with a prevalence of 12.4% for hyperactivity-impulsivity and 16.3% for inattention disorders respectively. The study also revealed a variety of family factors to be significantly associated with the development of Attention Deficit Hyperactivity Disorder. The prevalence of each subtype of Attention Deficit Hyperactivity Disorder was higher if the child was the 6th one in the family. The prevalence of hyperactivity-impulsivity disorder was significantly higher among children living with single parents than those living with both parents. Inattention was significantly higher among those who had bottle feeding than breastfeeding. Several approaches directed to the child, family, the primary health care services, the school, and the community should be implemented to reduce the prevalence and incidence of Attention Deficit Hyperactivity Disorder. Teacher quality is another variable that has a significant impact on pupils' overall achievement scores. It was found that teacher education/qualification was the most important determinant of students' achievement in both advantaged and disadvantaged regions.⁵⁵

A study was conducted in Tehran, to assess the prevalence of children with Attention Deficit Hyperactivity Disorder. A sample of 2667 children including both boys and girls aged between 7-12 years was selected by a 2-stage method sampling among a grid of sectors of 19 different educational areas by stratified random sampling. The rate of Attention Deficit Hyperactivity Disorder in the considered children based on two questionnaires of Conners Parent and Teacher Rating Scales (CPRS and CTRS) and semi structured interviews were tested. According to the recent studies, it is possible to describe the rate of Attention Deficit Hyperactivity Disorder prevalence based on the CPRS and CTRS questionnaires and semi structured interview among the primary school children in Tehran (aged between 7-12 years of age) with a range of 3% to 6%.⁵⁶

A study was conducted in Kerala, South India. The aim of the study was to find the prevalence and associations of psychiatric disorder in children. Total sample size was 1403 children aged 8 to 12 years, selected by random cluster sampling. It was found that, a projected prevalence of 9.4% (95% CI 7.9-10.8%), associations of disorder with male sex, the Muslim religion, lower social class, less parental education, school failure, and impaired reading and vocabulary were found, but not with malnutrition or perinatal problems. The similarity to associations of disorder in Western studies was noted. The discussion focuses on the validity of comparisons of prevalence across cultures.⁵⁷

A study carried out on epidemiology of child mental health problems in Gaza Strip. A total of 959 children were selected out of which 453 were boys and 506 were girls. The age group ranged from 6 to 12 years, with a mean of 8.81 years. Teachers completed the Rutter scale B2. The results showed that the case incidence in boys was 247 (54.5%), while in girls it was 215 (46.5%). The differences between boys and girls were statistically significant, with boys rated by teachers with a significantly higher level. The teachers rated 48% of the children as at or above the cut-off level of 9. Factor analysis of the scale revealed the following three factors: antisocial behavior--aggression, anxiety--fearfulness, and school phobia.⁵⁸

A study was conducted to assess the behavioral and emotional problems of children with learning disabilities (LD) serious emotional disturbances (SED) and LD/SED, using the Teacher Report Form (TRF). The sample consisted of 217 students with LD, 72 with SED and 68 with SED/LD ages 6 to 18 (mean age = 11.5). A univariate analysis revealed that four scales significantly contributed to the multivariate effect for gender. Parents rated girls as having more somatic complaints, attention problems, more delinquent behavior and more aggressive behavior than boys. For social problems, the SED group scored higher than the LD group (LD < SED). Also the children with

learning disabilities differed from those with SED (serious emotional disturbance) mainly in terms of severity of problems, not with respective type of problems.⁵⁹

An exploratory study was conducted in Dharwad city. The aim of the study was to find the prevalence of learning difficulties/disability among primary school children and its effect on emotional problems and academic achievement. A sample of 198 children (110 with learning difficulties and 88 without learning difficulties) was drawn from 3 selected English medium schools studying in 3rd and 4th standards. A writing test was administered to know the learning difficulties/disability. Emotional problems were assessed through teachers ratings using emotional problem scale developed by Prout and Strohmer (1985) and two semesters grades were obtained from school records to know the academic achievement of selected children. Results revealed that prevalence was found to an extent of 21 per cent, among which 17 per cent of children had learning difficulties and 4 per cent had learning disability. The learning disabilities was found in writing errors such as substitutions, reversals, omissions, other than punctuation errors and wrong capitals etc. Boys had 2-4 times more learning difficulties / disability than girls. The learning difficulties were due to factors such as change in medium of instruction and number of hours spent by parents for coaching at home.⁶⁰

A study conducted on prevalence of tic disorders among primary school students in the city of Pavia, Italy. The samples was 2347 primary school children. Using trained school teachers as the source of the cases, all children with motor or vocal tics occurring intermittently and unpredictably out of a background of normal motor activity were accepted. The study findings were, total of 68 children (56 boys, 12 girls) aged 6-11 years were identified with tic disorders. The period prevalence was 2.9% (95% CI 2.3 to 3.7). The prevalence was 4.4% in boys and 1.1% in girls, with no detectable trends at age 6-11. Motor tics were present in 46 cases, vocal tics in 6, and motor and vocal tics in

16. Situation related tics were noted in 37 cases. A significant correlation was found between the presence of tic disorders and impaired school performance.⁶¹

Section II: Studies related to the effect of school mental health programme in the management of common mental health problems in primary school children.

The school mental health program (SMHP) is a very important and integral part of the educational system worldwide. In India, the SMHP is yet to be recognized and initiated as a part of the health component in schools⁽²²⁾. In practice it is restricted to individual work by child mental health professionals especially in big metropolitan cities focusing on sensitization of teachers on child developmental and mental health issues. Counseling services for students with persistent emotional issues and a referral system is set up in a few urban clinics.⁶²

The educational philosophy in ancient India was one of guru-chela/shisya parampara and stressed on the teacher being responsible both for literacy/knowledge and personality development in the ward. However, education is more achievement oriented than child oriented. It does not address the needs of all the children who in spite of various levels of scholastic competence are capable of learning and need to develop those skills, and become empowered to live effectively in this world. This empowerment is very essential in today's context in India as there is rapid globalization and urbanization with a breaking up of joint families and the traditional support systems.⁶³

Karnataka initiated the comprehensive school health services as far back as 1940. In 1936, one health training center was established with the assistance of Rock Feller Foundation to study the methodology, finances and manpower required to provide comprehensive health services which at that time included curative, preventive and promotive health services. The school health services continued to conduct medical

examinations only by the doctor once a year. However, a very big qualitative change took place in 1961, based on the recommendation of school health committee constituted by the Government of India.⁶⁴

Comprehensive school health programme was provided through primary health centers. The school nurse was drawn from the cadre of auxiliary nurse midwife with a basic training of 2 years in maternal and child health work for a period of three weeks. Similarly doctors' in charge of PHC's and teachers of these schools were oriented in comprehensive school health services. School health programme has been implemented successfully in all the primary and higher primary schools in the rural areas covering children 100% as per Government of India guidelines. Various activities such as medical examination of students, immunization of children with Diphtheria and Tetanus Toxoid (DT and TT), providing treatment for minor ailments and referring children requiring specialist care to the nearest primary health Centre regularly. Health education is being imparted to teachers as well as students on personal hygiene, environmental hygiene, drinking water, and also use of latrines implemented.⁶⁴

A cross-sectional study in 40 schools in Karkala Taluk, Karnataka was done to evaluate whether they met the 10 criteria of Child Friendly School initiative as recommended by Indian Academy of Pediatrics. Data were collected using a predesigned Proforma by talking to the headmaster and school teachers and inspection of the premises for various facilities. The study found that none of the schools met all the criteria; 90% of the schools did not have adequate toilet facilities, 90% did not have safe transportation for the students, children in 82% schools had excess baggage, 72% did not have access to safe drinking water, 57% did not have properly ventilated and illuminated classrooms, and physical punishment was being administered in 45% of schools. 72% of schools did have periodic health checkup, 60% of schools had clean

kitchen/ dining room, 60% had adequate facilities for games, and 57% had facilities for first aid facility at school.⁶⁵

A study on assessment of need for a school-based mental health programme in Nigeria: perspectives of school administrators states that, majority of children in Nigeria are unable to access mental health services. In this resource-poor setting, a school-based mental health service can be used to reach children who would otherwise not have access. An essential first step in the development of a school-based mental health programme is a needs assessment. Key informants (KIs) from southwest Nigeria were interviewed to identify their perspectives on child mental illness and needs for a school mental health programme. Data was analyzed using interpretative phenomenological analysis. Although KIs sometimes used derogatory terms to describe mental illness, they were able to give full descriptions of different kinds of mental illnesses in children and a range of causes based on the bio-psychosocial model of disease. KIs acknowledged deficiencies in their training even though they currently use parent, child and environment-centred interventions to deal with mental health problems in school. KIs reported teachers as comfortable with handling mental health issues in children and suggested interventions that included development of basic and ongoing training. Barriers, such as poverty, ignorance and stigma need to be addressed, while government involvement and enlightenment campaigns are critical components of a successful programme.⁶⁶

A study conducted on tying together research and practice using ROPE for successful partnerships in school mental health stated that there is solid evidence for strategies and programs that, if implemented with fidelity in schools, will enhance the mental health of children and youth. These practices are, however, inconsistently applied and rarely evaluated programmatically in every day practice. In recent years, implementation variables that influence uptake have received attention. An emerging

area of interest is the role that research partnerships might play in narrowing the gap between science and practice. Drawing on the literature and practice examples, collaborators from the United States and Canada explore the role of partnerships in bringing the worlds of research and practice closer into alignment.⁶⁷

The article presents findings from a meta-analysis of 213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergartens through high school students. Compared to controls, SEL participants demonstrated significantly improved social and emotional skills, attitudes, behaviour, and academic performance that reflected an 11-percentile-point gain in achievement. School teaching staff successfully conducted SEL programs. The use of 4 recommended practices for developing skills and the presence of implementation problems moderated program outcomes. The findings add to the growing empirical evidence regarding the positive impact of SEL programs. Policy makers, educators, and the public can contribute to healthy development of children by supporting the incorporation of evidence-based SEL programming into standard educational practice.⁶⁸

The prevalence and associations of psychiatric disorder in children aimed to identify the prevalence and associations of childhood psychiatric disorder among 1403 children aged 8 to 12 years selected by random cluster sampling, and found that, a projected prevalence of 9.4% (95% CI 7.9-10.8%), associations of disorder with male sex, the Muslim religion, lower social class, less parental education, school failure, and impaired reading and vocabulary were found, but not with malnutrition or perinatal problems. The similarity to associations of disorder in Western studies was noted. The discussion focuses on the validity of comparisons of prevalence across cultures.⁶⁹

A national survey examined child and adolescent mental health and found that 14% or 500,000 children and adolescents in Australia have significant mental health problems, with rates in children the same or higher than rates in adolescents. More

specifically it identified that delinquent behaviour (7%), attention problems (6.1%) and aggression (5.2%) are major mental health problems of Australian children.⁷⁰

The target populations for the initiative is young children displaying challenging or difficult behaviours and/or have conduct disorder in Prep to Grade 3 in mainstream primary schools within the CAMHS catchment area.⁷⁰

Antisocial behaviours in primary aged children are fairly common and often are developmentally normal. However, when antisocial behaviours significantly interfere with a child's academic, social and/or emotional development the child may be at risk of developing conduct disorder.⁷⁰

Information collected by the former Mental Health Branch (now the Mental Health, Drugs and Regions Division) in 2001 indicated that 17% of clients attending child and adolescent specialist mental health services (CAMHS) had conduct disorder with approximately half of these also having co-morbid emotional disturbance.⁷⁰

Early Action Programs (CAESA) reflects the international trend to address problems early to minimise distress and the negative impacts of behavioural problems and disorders on the lives of children and their families. These service developments provide an opportunity for CAMHS to work with their local schools to provide timely and evidence-based interventions for young children, their parents and teachers, that can address current issues with behaviour management, prevent any deterioration of behaviour in vulnerable students and promote health and well-being.⁷⁰

Two three-year pilot projects began operation in 2004. Initial findings are positive. The successes and challenges from these pilots have informed the model of care for the Early Action Programs more broadly. These pilot project teams, now recurrently funded, have developed resources and have extensive experience that is invaluable to the newer programs.⁷⁰

The CASEA program began in 2004 with two three-year pilots. Initial evaluations from these pilot projects were positive and the successes and challenges of these pilot projects have informed the model of care for CAMHS and Schools Early Action Programs more broadly. The program has shown positive results in identifying and intervening in conduct disorders early in primary school aged children. Established CASEA programs in Bendigo and Austin CAMHS are being evaluated in partnership with the University of Melbourne and Mindful- Centre for Training and Research in Developmental Health. The 3 year evaluation uses a randomised control trial methodology to evaluate the impact of the CASEA program. Schools with a CASEA program and schools on the CASEA program wait list are evaluated at two intervals to measure changes in student behaviour; the schools with a CASEA program being evaluated pre and post CASEA intervention. Preliminary results in 2009 suggested that the CASEA program has had a positive impact on reducing conduct disorders. Additionally, Eastern Health CAMHS, in partnership with Deakin University and DEECD, undertook a longitudinal study of its CASEA program in 2007-08. The evaluation took place over 23 months to measure the outcomes for children who completed the CASEA program. Longitudinal domains such as overall difficulties, conduct problems, psychosocial impairment and social skills, as reported by parents and teachers, were utilised. Findings from the study indicated significant post-treatment gains made by children in each domain were sustained at follow up. The evaluation provides support for the effectiveness of multi-modal early intervention programs, such as CASEA, for the treatment of childhood conduct disorders.⁷⁰

Educable mental retardation is a delay in acquiring basic reading, writing and counting skills emerging through late speaking and linguistic development along with social, emotional or behavioral problems. It is pointed out that such children have intelligence in the 45-74 range, and that they are incompetent in terms of language skills,

perception power, memory capacity, imagination and creativeness. Primary school curriculum for educable mentally retarded children was adopted so as to implement beginning in 2001-2002 academic years. The curriculum was designed so as to apply in primary education schools where educable mentally retarded children attend or in private classes included in the body of primary education schools. It was designed in order for such children to improve their skills of understanding themselves, establishing positive social relations, adjusting to the social, technological and physical environment, and surviving independently. This current study is based on a qualitative method, and is focused on educable mentally retarded children who are at primary school age in Turkey. Having described the characteristics of such children, their needs are explained, the curriculum developed for such children is described, and teachers' views concerning the implementation of the curriculum are presented in this research.⁷⁰

A two stage epidemiological study of psychological disturbance was conducted among 5 to 8 years old school going children in Bangalore city. A sample of 1535 children were selected using a purposive sampling procedure and the children were assessed using the children behavior questionnaire. The finding indicated that 18.31% of the children were found to be disturbed, with boys having a significantly higher prevalence than the girls. In addition 'antisocial' problems were more commonly found among boys than girls who more often manifested 'neurotic' problems.⁷¹

School health programs have been part of schooling for most of this century. The health promoting school is a recently developed concept which seeks to provide a multifaceted approach to school health. Will it provide a better framework to assist schools address the health issues of their students is what it intends to find out. This paper examines the development of the health promoting school and identifies its structural components. It reviews the claims and evidence which have emerged from the school health research literature which focus on primary schools. Findings indicate

health gains for primary school students are difficult to assess, and will most likely occur if a well-designed program is implemented which links the curriculum with other health promoting school activities, contains substantial professional development for teachers and is underpinned by a theoretical model. The paper concludes by discussing how improvements can be made in more accurately assessing the effectiveness of the health promoting primary school in improving school health.⁷²

A Randomized controlled trial (RCT) was conducted among children in their first four school years (ages 4–8 years) in the East Midlands area of England. The aim was to test the feasibility and effectiveness of a parenting programme (with and without an accompanying teacher session) in primary schools. The National Institute for Health and Clinical Excellence guidelines for attention deficit/hyperactivity disorder (ADHD), a common childhood behavioral disorder, recommend a stepped care approach for the identification and management of these problems. Parents of children with high levels of hyperactivity and inattention may benefit from intervention programmes involving behavioral management and educational approaches. Such interventions were further enhanced by providing training and feedback to teachers about the strategies discussed with parents, in relation to children with high levels of hyperactivity, impulsiveness and inattention. Parents will complete a screening measure, the Strengths and Difficulties Questionnaire, to identify children with high levels of hyperactivity/inattention. Three approaches to reducing hyperactivity and attention problems will be compared: a group programme for parents (parent-only intervention); group programme for parents combined with feedback to teachers (combined intervention); and waiting list control (no intervention). Differences between arms on the short version of Conners' Parent and Teacher Rating Scales Revised was compared and also used to inform the sample size required for a future definitive cluster RCT. The outcomes of this study were to inform

policy makers about the feasibility, acceptability and effectiveness of delivering targeted behavioral interventions within a school setting.⁷³

Growing evidence shows that school mental health programs improve educational outcomes by decreasing absences, decreasing discipline referrals, and improving test scores. The key to improving academic achievement is to identify mental health problems early and, when needed, provide appropriate services or links to services. The extent, severity, and far reaching consequences make it imperative that our Nation adopt a comprehensive, systematic approach to improving the mental health status of children. Clearly, school mental health programs must provide any screening or treatment services with full attention to the confidentiality and privacy of children and families. The Columbia University Teen Screen program provides a model for early intervention. The Commission recommends that Federal, State, and local child-serving agencies fully recognize and address the mental health needs of youth in the education system. They can work collaboratively with families to develop, evaluate, and disseminate effective approaches for providing mental health services and supports to youth in schools along a critical continuum of care. This continuum includes education and training, prevention, early identification, early intervention, and treatment.⁷⁴

A report by the Institute of Medicine revealed that between 14-20% of children and adolescents experience a mental, emotional, or behavioral disorder each year. Approximately 70% of school-aged children with a diagnosable mental illness do not receive treatment. In order to meet the needs of our nation's children and youth, it is critical to provide mental health care in schools. School mental health programs have significantly greater access to children and adolescents relative to community mental health centers. Over the past 20 years, policies and programs that integrate mental health services into the schools have burgeoned, and research continues to demonstrate their positive impacts on educational and mental health outcomes. School

mental health programs have a positive impact across a variety of emotional and behavioral outcomes, and educational outcomes in children and adolescents. Programs that successfully promote social, emotional, and behavioral health, build positive school climate, and prevent school violence and dropout. In recognition of the severity of the crisis and the demonstrated benefits associated with school mental health, significant federal, state, and local support has been directed towards the development and implementation of school mental health programs nationwide.⁷⁵

School mental health programs have significantly greater access to children and adolescents relative to community mental health centers, as evidenced by: 70-80% of children and adolescents who receive mental health services access services in the school setting. Approximately 96% of children follow through with school mental health services after the initial referral; whereas only 13% of children follow through with referrals to community mental health centers. Twenty percent of students receive some form of school mental health services.⁷⁵

Freedom Commission report includes as one of its nineteen direct recommendations, integrating mental health services within schools. This promotes an ecologically grounded, comprehensive approach to helping children and families by addressing their educational and concomitant emotional, behavioural and developmental needs.⁷⁵

A study was conducted in US with an aim to promote School mental health policies and programs that successfully promote social, emotional, and behavioral health, build positive school climate, and prevent school violence and dropout. School mental health programs were successful in reaching the whole school. Students and teachers felt that they are in a positive learning environment and there were fewer referrals to special education based on emotional/behavioural problems.⁷⁶

There is evidence that school mental health programs have an impact across a variety of emotional and behavioral problems in children and adolescents. In addition, it has been well-documented that addressing mental health issues in youth can help reduce non-academic barriers to learning, which can lead to the academic gains that are a focus of current and proposed reforms.⁷⁶

When students' mental health needs are effectively addressed through school mental health programs, the following outcomes have been shown: Reduced emotional and behavioral disorders such as attention deficit/hyperactivity disorder, depression, and conduct disorder, they perform better academically and graduation rates higher. Improved behaviours in the school and decreased disciplinary actions.⁷⁶

A universal review of classroom-based programming was conducted of 180 school-based studies. Students in the Social Emotional Learning (SEL) programs demonstrated improvement in their social-emotional skills; attitudes towards self, school, and others; social behaviour; conduct problems; emotional distress; and academic performance. Students in the SEL programs also displayed an average gain on achievement test scores of 11 to 17 percentile points.⁷⁶

The D.C. School Mental Health Program (SMHP), located within the Office of Programs and Policy in the D.C. Department of Mental Health, provides a full continuum of services including prevention, early intervention, and treatment services to youth, families, teachers and school staff. An evaluation of the DC SMHP during the 2007-2008 academic year suggested that students receiving school mental health services made significant improvements.⁷⁶

A study was conducted in the Pacific Northwest among 938 elementary students from either first or second grade, in 10 schools (five control and five intervention) who were randomly assigned to Raising Healthy Children (RHC) intervention (i.e., teacher training on topics such as co-operative learning methods, strategies to enhance student

motivation, and inter-personal skills) had significantly higher teacher- and parent-reported academic performance. Specifically, participating students had significantly higher teacher-reported academic performance and a stronger commitment to school, as well as demonstrated a significant decrease in anti-social behaviours and increased social competency compared to non participating peers. Parent-reported outcomes also showed that participating students had higher academic performance, and a stronger commitment to school.⁷⁶

A meta-analysis of 24 articles (published between 1990 and June 2006) which examined the impact of school mental health interventions on both mental health and educational outcomes found that 62.5% of the interventions studied demonstrated dually positive outcomes with regards to both mental health and education. In addition, the authors identified 40 studies that focused exclusively on mental health outcomes, with 95% reporting positive findings.

A meta-analysis of 249 experimental and quasi-experimental studies of school-based psychosocial prevention programs for aggressive and disruptive behavior yielded effect sizes of 0.21 and 0.29 for universal and selected/indicated programs, respectively.

In an urban setting, elementary school children (n=201) who participated in a school mental health program demonstrated statistically significant reductions in conduct disordered behavior, attention deficit-hyperactivity, and depressive symptomatology over the course of approximately one year.

Approximately 40 studies reviewed on the Good Behavior Game (a classroom management strategy in which the goal is to decrease disruptive behaviours such as talking, out of seat behavior, aggression, and name-calling) found almost immediate reductions in disruptive, aggressive, or inattentive behaviours.

After one year of implementation of a comprehensive (i.e., universal, indicated, and intensive services) school mental health program within two schools in an inner-city

urban school district, students demonstrated significantly fewer mental health difficulties, less functional impairment, and improved behavior. Students also reported improved mental health knowledge, attitudes, beliefs, and behavioural intentions. Furthermore, teachers reported significantly greater proficiency in managing mental health problems in their classrooms.⁷⁶

A study was conducted to provide a comprehensive programme to help develop children's social and emotional skills and well-being. By implementing the curriculum that integrates the development of social and emotional skills within all subject areas. The skills included problem-solving, coping, conflict management/resolution and understanding and managing feelings. This should be provided throughout primary education by appropriately trained teachers and practitioners. Training and development should be ensured so that teachers and practitioners have the knowledge, understanding and skills to deliver this curriculum effectively. The training should include how to manage behaviours and how to build successful relationships. This involves providing information or offering small, group-based programmes run by community nurses (such as school nurses and health visitors) or other appropriately trained health or education practitioners. In addition, all parents should be given details of the school's policies on promoting social and emotional wellbeing and preventing mental health problems. The target population was the Children in primary education (aged 4–11 years) who were showing early signs of emotional and social difficulties, (in particular those who were showing early signs of anxiety or emotional distress (for example, children who had poor peer relations, low self-esteem, were withdrawn or had behavioural problems) at risk of developing (or who already displayed) disruptive behavioural problems. Parents or care-takers of children aged 4–11 years who are showing early signs of emotional and social difficulties. Teachers and practitioners were working with children in primary education. Those working with local authority education

and children's services (including healthy schools teams), primary care (including school nurses), child and adolescent mental health services (tiers one and two) and voluntary agencies. Study ensured that teachers and practitioners are trained to identify and assess the early signs of anxiety, emotional distress and behavioural problems among primary schoolchildren. They should also be able to assess whether a specialist should be involved and make an appropriate request. Parents of children who are exposed to difficult situations refuse to go to school, those who have children who are showing early signs of anxiety, emotional distress or behavioural problems.⁷⁶

A study was conducted in US, which showed that 42 percent of first, second and third grade girls want to lost weight and 45 percent of boys and girls in grades three through six want to be thinner. Lauren Stern's new book reveals that 9 percent of nine year olds had vomited to lose weight and 81 percent of 10 year olds were afraid of being fat. These statistics underlined that the incidence of eating disorders amongst the primary school age group is increasing. 101 five to 13-year-old children were newly diagnosed with an eating disorder. About two-thirds were affected by anorexia nervosa. The rest were experiencing "food avoidant emotional disorder"- a condition unique to children which involved extreme weight loss driven by high anxiety levels, rather than wanting to be thin. Children spend much of their early lives in schools, an environment that is highly social and competitive with notoriously rigid hierarchies often based on physical appearances. Studies have found that teachers are also drawn to the most attractive children, which can further compound a child's poor body image. In a school-going age child, a poor body image may result in social withdrawal and poor self-esteem. If primary school aged children develop a fixation on the way they look and a negative awareness about weight and size; these feelings can trigger self-destructive thoughts and behavior which can spiral into an eating disorder. The primary school age group must be targeted and engage them constructively in order to educate them about

positive body image to aid in fostering a positive self-image. From an early age children are susceptible to the messages they receive, and negative messages are in danger of being absorbed into their belief system. If teachers are proactive at the primary school level, they have every chance of reducing the incidence of disordered eating at an early age, as well as when children grow into teenagers. Children emulate what they see and hear so parents, care givers, teachers and other adult role models play a pivotal role in their development and have the opportunity to positively influence them through discussion and affirmative action. Leading by example will encourage children to develop a healthy relationship with food and their bodies.⁷⁷

A search was conducted of the following electronic databases from 1990 to April 2001: MEDLINE, CINAHL, ERIC, EMBASE, PsycINFO, the Cochrane Database and the York Database of Abstracts of Reviews of Effectiveness. One area of the Chronic Disease Prevention section of the Mandatory Health Programs and Services Guidelines is concerned with the delivery of strategies designed to increase awareness and knowledge, build skills and improve the social and physical environment in order to support healthy eating, healthy physical activity and positive self-esteem. Many programs, particularly school curricula, have been developed in response to the high levels of disordered eating and body weight concern in young female children. Key journals related to eating disorders and adolescent health were hand searched for the same time period. Relevant references were retrieved from the bibliographies back to 1986. Each article was rated for relevance and validity by two independent readers. Then, data abstraction was done for studies that rated strong or moderate. To be included, the articles had to evaluated, an intervention program for prevention of eating disorders to target pre-adolescent to young adults to be randomized, quasi-randomized or a cohort study was done. **Results revealed that** One hundred sixty-six articles were retrieved; thirty-six were relevant. Eighteen articles were rated as “weak”, sixteen articles

were rated “moderate” or “strong” in the methodology, with outcomes measures of known reliability and validity. The sixteen articles actually described seventeen studies. All were school-based interventions. While all of the studies were aimed at prevention of eating disorders, all used outcome measures of knowledge, attitudes or behaviors that were associated with eating disorders, and were not an actual clinical assessment or a diagnosis of eating disorders. Interventions directed to primary school children (versus high school), of at least nine weeks duration, and targeted to healthy eating (versus discussion of signs, symptoms and treatment of eating disorders), were found to be more effective in increasing knowledge, changing attitudes, decreasing the importance of social acceptance in the short term, and occasionally reduced binge eating and dieting behaviours, with diminishing effects as the length of follow-up increased. Within this group of studies, programs specifically for healthy eating and exercise show similar promise. Hence it was concluded that School curricula can have at least a short-term positive effect on increasing knowledge, changing attitudes and decreasing some behaviour that are associated with eating disorders. Interventions need to be tested that include booster sessions, more environmental support, “healthy schools” approach or community-wide interventions.⁷⁸

A study was conducted to evaluate the efficacy of a new school-based eating disorder prevention program designed to reduce dietary restraint and the level of preoccupation with regard to shape and weight. 106 (61 females and 45 males) samples were selected. Eleven to twelve -year-old students were evaluated. Fifty five children participated in the program (experimental group). An additional 51 students formed the control group. The program met for six sessions, two hours per session. After six months, the experimental group received two booster sessions of two hours in two consecutive weeks. Outcome measures included the Eating Disorder Examination Questionnaire (EDE-Q), the children's version of the Eating Attitudes Test (EAT), the

Rosenberg Self-Esteem Scale (RSES), and a Knowledge Questionnaire (KQ). The questionnaires were administered in both the experimental and control groups, one week before the intervention, one week afterwards, and at six-month and 12-month follow-ups. Unlike a previous school-based eating disorder prevention program, in the experimental group both an increase in knowledge and a decrease in some attitudes were maintained at 12-month follow-up (Eating Concerns EDE-Q scores). Although more intensive interventions seem necessary to modify shape and weight concern and self-esteem, these findings suggest that the intervention had been useful since it led to both an increase in knowledge and a decrease in some dysfunctional eating attitudes.⁷⁹

A study was conducted to evaluate the efficacy of a school based program of eating disorder prevention on a sample of young adolescents in Croatia. The program was designed to reduce dietary restraint and preoccupation with shape and weight. One hundred and thirty-nine students (69 boys and 70 girls; mean age 12.8 years) were evaluated; 75 participated in the program (experimental group) and 64 formed the control group. Outcome measures included eating disorder attitudes, dieting behavior, self esteem and knowledge of the topics covered by the program. Outcome measures were evaluated one week before the intervention, one week afterwards, and during a follow-up of 6 months. The program significantly reduced eating disorder attitudes and dieting behavior, and improved knowledge in the female experimental group. A significant and positive effect on eating disorders attitude and knowledge, but not on dietary habits, was noticed in the male experimental group. No significant effects were observed in the control group. The findings of this prevention program give encouraging results and should be evaluated in further studies on larger samples.⁸⁰

Section III: Studies related to knowledge and skill of teachers in the management of common mental health problems in primary school children.

The teacher has an important role in the management of health problems in children. Without good health a student is handicapped in his/ her education. Studies have been conducted on the management of health problems in children by teachers.⁸¹

There is a growing expectation that school teachers should not only act as educators by delivering the national curriculum, but also be more involved as tier one mental health professionals. In this role they are expected to assume some responsibility in the early identification of children's mental health problems and to refer these children for appropriate support as required. With teachers' experiences in the light of these expectations and in the context of greater inclusion in mind, a study was undertaken with in-depth interviews to explore teachers' views on competency and training in mental health management. The findings indicate a widespread perception that teachers feel inadequately prepared to manage pupils with mental health needs.⁸¹

A study was conducted in Athens among Greek primary teachers. This study aimed to identify the types of emotional and behavioural difficulties which was found to be problematic in their teaching and also to identify their perceptions of the prevalence of these difficulties. A Behaviour Inventory was administered to 170 elementary teachers from 23 randomly selected schools. Analysis showed that teachers found 'work avoidance', 'depressive mood', 'negativism', 'physical aggression' and 'lack of concentration' as most problematic. By contrast, it was found that 'excessive shyness' and 'attention seeking' as least problematic. However, only one of the most problematic behaviours, 'lack of concentration', was among the highly frequent behaviours. The other highly frequent behaviours were 'talking without permission', 'untidiness' and 'fidgeting'. The least frequent behaviours were 'over-dependence on teacher' and 'school phobia'.

The findings are discussed in terms of historical and international patterns and trends in teachers' perceptions of emotional and behavioural difficulties. The significance of the study for the professional development of teachers and for policy-makers was also examined.⁸²

This study investigated the ability of primary school teachers to recognise and refer children with anxiety symptoms. Samples were two hundred and ninety-nine primary school teachers, who completed a questionnaire exploring their recognition and referral responses to five hypothetical vignettes that described boys and girls with varying severity of anxiety symptoms. Results revealed that teachers were generally able to recognise and make the decision to refer children with severe levels of anxiety. However, it was found that they had difficulty distinguishing between children with moderate anxiety symptoms and a severe anxiety disorder. Female teachers were more likely to refer children than male teachers.⁸³

A study was conducted in NIMHANS, Bangalore by Child mental health team on teachers' knowledge of children's exposure to family risk factors was using the Family Risk Factor Checklist-Teacher. Data collected for 756 children indicated that teachers had accurate knowledge of children's exposure to factors such as adverse life events and family socioeconomic status, which predicted children's mental health problems at 1 year follow-up. For children at high teacher-rated risk, odds ratios ranged from 3.04 to 7.46, after adjustment for prior mental health problems. Teachers had poor knowledge of internal family functioning, such as conflict, parenting practices, or parental drug abuse. The findings suggest that asking teachers to report children's exposure to particular family risk factors is a feasible method for identifying children for selective interventions, but improved family-school communication may further enhance this process.⁸⁴

This study questioned 198 British primary teachers and reported a remarkable consensus among the respondents that 'talking out of turn' and 'hindering other children' were most troublesome and most frequent in classrooms. When teachers' attention was turned to particularly troublesome children, they identified a range of behaviours, such as 'disobedience', 'idleness/slowness' and 'physical aggression'. Moreover, a striking finding of this research was the fact that 51 per cent of all teachers and a larger proportion of women than men admitted that they spent more attention than they ought on problems of order and control.⁸⁵

In this study, the 'disobedience', 'restlessness' and 'physical aggression', in addition to 'not listening', 'poor concentration', 'bullying' and 'defiance of the teacher', were considered by 85 primary head teachers of English schools as the behaviours causing most concern to class teachers and themselves. At the same time, 'aggression', 'disobedience', 'poor concentration', 'defiance' and 'clowning' were nominated as the behaviours most frequently occurring in classroom settings.⁸⁶

A study was conducted in UK. Samples were of 23 class teachers and 21 head teachers, in one local education authority. 'What comes to mind when there is talk of behaviour difficulties' are behaviours which caused concern to the head teachers in primary schools which included 'disruption', 'aggression', 'vandalism', 'pilfering', 'bullying', 'being insolent to staff', 'hyperactivity', 'swearing', 'attention seeking', 'withdrawal', 'immaturity', 'over-dependence' and 'lack of concentration'. The behaviour that caused concern to class teachers included 'aggression', 'disobedience', 'disruption', 'hyperactivity', 'shyness', 'inertia', 'bullying', 'swearing', 'vandalism' and 'self-centredness'. According to the researchers, most of the teachers thought that 'shy' and 'withdrawn' children had a problem, but with some reservations. Uppermost in the perception of the meaning of behaviour difficulties were clearly the types like 'aggression', 'defiance', 'disruption' and 'distractibility'.⁸⁷

In this study of teachers' concerns about their pupils, teachers were asked simply to identify those children who were causing them an 'unusually high degree of concern'. Among the areas of concern were found conduct problems, such as 'aggressive behaviour'; neurotic problems, such as 'withdrawn', 'timid'; mixed conduct/neurotic problems and non-attendance problems, such as 'school phobia'; and finally attention-seeking problems.⁸⁸

A study was conducted in Britain. The Committee of Enquiry into Discipline in Schools conducted the largest structured survey ever carried out concerning teachers' perceptions of problem students, both in primary and secondary schools. The national survey obtained responses from over 3,500 teachers in 220 primary and 250 secondary schools, giving a comparatively high response rate for surveys of this kind (89 percent of the primary and 79 per cent of the secondary teachers in the survey). The great majority of primary and secondary teachers reported that their lessons were disrupted by discipline problems. The most common forms of undesirable behaviour which they reported were 'pupils talk out of turn', 'hindering other pupils', 'making unnecessary (non-verbal) noise' and 'calculated idleness or work avoidance'. In addition, 'verbal abuse towards other children', 'general rowdiness' and 'impertinent responses' were considered by both primary and secondary teachers to be frequent behaviour types. Primary teachers further noted that 'physical aggression towards other pupils' was a behaviour type that they had to deal with. Concerning the problems that were serious for teachers themselves, more than one in 10 secondary teachers and more than one in 20 primary teachers mentioned that they had 'verbal abuse' directed at them by students during the week of the survey. The most frequently reported behaviours that gave primary and secondary teachers difficulty in teaching were 'talking out of turn', 'hindering other children', 'calculated idleness or work avoidance' and 'verbal abuse'.

Lastly, 'physical aggression towards other children' was of particular concern to primary teachers.⁸⁹

A study conducted in Australia, to assess the teachers knowledge of children's exposure to family risk factors by using the family risk factor checklist - Teachers during 30th December 2004, Data collected for 756 children indicated that teachers had accurate knowledge of children's exposure to factors such as adverse life events and Family socio economic status, which predicted children mental health problems at 1 year follow-up for children at high teach risk, odds ratios ranged from 3.4 to 7.41 after adjusting for prior mental health problems. The outcome of study showed that teachers had poor knowledge of internal family functioning, such as conflict, parenting, practices or parental drug abuse.⁹⁰

A study was conducted in India on sensitizing the teachers towards school mental health issues. An Indian experience states that the School Mental Health (SMH) services play critical roles fostering positive mental health and helping children with psychological problems. Despite its proven value, SMH services remain less developed in India. In this context, sensitizing teachers about child mental health issues could be considered as an important step in SMH promotion.⁹¹

A study on Knowledge about ADHD was relatively low. 46.9% of teachers agreed that ADHD is due to biological and genetic vulnerabilities and causation. 53.1% of all the teachers considered ADHD to be the result of parental spoiling. The attitude score towards ADHD children was also low. 64.8% agree that the same disciplinary rules used for all students should also be applied to ADHD children. 77.6% believe that ADHD students experience difficulties in their relations with their classmates. There was a significant correlation between teachers' knowledge of ADHD and their attitude. The main sources of knowledge about ADHD were: Television and radio; friends and relatives; periodicals, newspapers and magazines.⁹²

A study on teachers' knowledge of normal and abnormal elimination patterns in elementary school children has found that most elementary school teachers are unaware of the potential health problems of elimination dysfunction. One third of respondents indicated that they ask children to wait to go to the bathroom. Suboptimal conditions exist in most of the school bathrooms, with only 35% of the boys' restrooms and 48% of the girls' restrooms reported as "always clean." Those teachers with more experience were more likely to report information about abnormal elimination to the school nurse. Very few teachers (18% of respondents) reported having received information about abnormal elimination and even fewer (8% of respondents) were aware of specialists trained to treat children with these problems. School nurses can have a significant impact on the development of healthy bladder habits in children.⁹³

A study was conducted among 970 Portuguese mid class children (530 girls and 440 boys) aged between 8 to 11 years ($M=8.47$; $SD=.771$). The study was published on Rutter Children Behavior Questionnaire for teachers. To establish the psychometric properties of the RCBQ for completion by teachers and to determine behavioral and emotional problems in young children, as they occur in the classroom. A two factor structure was found to be suitable, exhibiting an acceptable reliability and test-re-test values along a 3-month period. An average of 16.1% of the pupils exhibited some behavioral problems, where teachers described anxiety (3.1%), worry (5.1%) and non-concentration (14.1%) as the most prevalent symptoms. The findings suggest that the translated scale could serve as a rapid and useful screening instrument in clinical and in research settings.⁹⁴

In a longitudinal study, 603 children were rated by the teachers in the II grade (8 to 9 years) and investigation on the use of teacher assessments in screening for learning disabilities, and the ratings were correlated with examinations of reading, spelling and intelligence in III grade. The III grade testing for reading, spelling and intelligence

classified children into groups with low achievement and dyslexia and these two groups were compared with normally achieving children. The accuracy of teacher assessment, measured with correlation analysis. ROC (Receiver Operating Characteristics) curves and kappa indices showed that teachers were quite accurate in their judgment of low achievement, but somewhat less efficient in their judgment of specific reading difficulties.⁹⁵

Teacher qualities are another variable that has a significant impact on pupils' overall achievement scores. It was found that teacher education/ qualification was the most important determinant of students' achievement in both advantaged and disadvantaged regions.⁹⁵

Teacher experience was found to be an important predictor of student achievement in major empirical studies. Studies have reported a negative correlation between teaching and learning outcomes.⁹⁵

A study was conducted in Chandigarh, India on prevalence of psychiatric disorders among school children, aged 4-11 years. They were studied using multi-stage random sampling, and multi-informant assessment procedure. Teachers assessment on Rutter-B Scale (Stage I) was followed by parent interview (Stage II) for all children on the Childhood Psychopathology Measurement Schedule which is an Indian adaptation of Achenbach's Childhood Behavior Checklist (CBCL). Children scoring above the cut-off at Stage I and/or Stage II were assessed clinically by two psychiatrists (Stage III) who interviewed parents as well as the child taking detailed clinical history and mental state examination including IQ assessment. The major findings of the study were 6.33 per cent of the children studied (n = 963) were found to have psychiatric disorders on ICD-10 criteria. Teacher's estimation of the prevalence rates was higher, i.e., 10.17 per cent as compared to parent's estimate i.e., 7.48 per cent. The most prevalent disorder was enuresis.⁹⁶

A study carried out in Nigeria. Rutter's Behavior Scale (B2) for children (Teacher's Scale): was validated and standardized. Nigerian teachers were asked to place the children in their classes in either of two groups: Group I, comprising children of normal behavior, and Group II, children who, in their opinion, had significant behavioral problems. Validity of the teachers' grouping was confirmed, using as reference measure the findings from traditional psychological assessment of the children. The teachers then completed the Rutter Child Behavior Questionnaire (Teachers' Scale) for the same children. The children's scores on the Rutter Scale were matched against the teacher's grouping, the aim being to identify the Rutter Score that separates the children into two 'behavior' groups that agree most closely with the teachers' own grouping. Results show that this was achieved at the Rutter Score of 10 ($k = 0.66$). Children scoring 10 or more on the Rutter scale appeared mostly in Group II, while those scoring less than 10 were mostly in Group I. Rutter's scale was found to be a highly valid instrument for identifying Nigerian children with behavioral problems. It is recommended that Nigerian children scoring $> \text{ or } = 10$ on Rutter's Behavior Questionnaire (Teacher's Scale), should be regarded as children with behavioral disorder. This is one point higher than the score of $> \text{ or } = 9$ recommended for British children.⁹⁷.

A study was carried out to examine associations between classroom climate and pupils' health in primary school and whether pupils who had emotional and behavioral problems in the second grade are more vulnerable to the effects of a poor classroom climate years later. The study was carried out by means of questionnaires to teachers. The students ($n = 1$) were surveyed in the second (aged 8 years, Time 1) and sixth grade (aged 12 years, Time 2). The Rutter Teacher Questionnaire (RB2) at Time 1 and the Teacher Report Form (TRF) at Time 2 were used to measure internalizing, externalizing and total problem scores. Classroom climate was measured using a composite variable at Time 2. The results show associations between poor sixth-grade

classroom climate and an increase in emotional and behavioural problems in both boys and girls. In addition, the girls were overall poorly adjusted, particularly those who had externalizing problems in the second grade, were especially vulnerable to a poor.⁹⁸

A cross sectional survey among school children aged 5-11 years was conducted in 2006 in Karachi, Pakistan to find out behavioral problems with the active participation of school teachers. Assessment of children's mental health was conducted using Strength and Difficulties Questionnaire (SDQ). In this study, teachers' estimation was slightly higher than the parent's estimation. There was also a gender difference in prevalence; boys had higher estimates of behavioral problems, whereas emotional problems were more common amongst females.⁹⁹

A cross sectional study was conducted in Bangalore city, to identify the prevalence of behavioral problems among a sample of 5 to 8 year old Indian children by the teacher, with a two-instrument two-phase design. In the first phase (screening) 48 teachers rated 1535 children from the schools, on the 26 item Children's Behavior Questionnaire (CBQ) .281 Children were identified as disturbed. In the second phase, 279 of children were identified as disturbed on the CBQ.¹⁰⁰

A study was conducted in Ludhiana, India to find out the prevalence of behavioral problems in 957 school children using Rutter B scale which was to be completed by the class teachers. Among 141 children (14.6%) scored more than 9 points and were included in the second part of the study. An equal number of sex matched children scoring less than 9 points served as controls. Both these groups were called for an interview with a child psychiatrist along with their parents. Based on screening instruments results and parental interview 45.6% of the children were estimated to have behavioral problems, of which 36.5% had significant problems the study concluded that close co-operation between school teachers, parents and health care providers is essential to ensure healthy development of children.¹⁰¹

A prevalence study of emotional and behavioral disorders among 1186 (6-12 year) children was conducted in Minia, Egypt, where data was collected from teachers and parents using the Strengths and Difficulties Questionnaire with a 98 and 91% response respectively. Prevalence of abnormal symptom scores is reported for both parents and teachers. The findings shown that abnormal total difficulties: teachers 34.7% and parents 20.6% Abnormal prosocial scores: teachers 24.9% and parents 11.8% but prevalence of probable psychiatric diagnoses was much lower (Any psychiatric diagnosis 8.5%; Emotional disorder; Conduct disorder 6.6%; Hyperactivity disorder 0.7% . These findings were concluded that the prevalence of emotional and behavioral symptoms was high as reported by both parents and teachers.¹⁰²

A study was conducted in USA on Preventing conduct problems and improving school readiness. A Sample of 1,768 students and 153 teachers was selected. Experimental Design was used. Randomized Trial Method was used to collect samples. Results revealed that intervention group teachers used more positive classroom management strategies and their students showed more social competence and fewer conduct problems than control group teachers and students. These findings provide support for the efficacy of this universal preventive curriculum for enhancing school protective factors and reducing child and classroom risk factors faced by socio-economically disadvantaged children.¹⁰³

A study was conducted in Kabwe and Kapiri-mposhi districts of Zambia. The objective of this study was to investigate the collaboration between parents and teachers in the education of children with mental retardation. Many regular primary schools in Zambia are including children with mental retardation as stated in the education policy (MOE, 1996). Children with mental retardation encounter intellectual challenges in their academic work such that their learning is at a slow pace. Therefore, it is the responsibility of parents to reinforce their children's schoolwork at home to complement

teacher's efforts. This can only be done when parents and teachers are in good collaboration. In pursuit of the in-depth empirical data concerning collaboration, a qualitative research approach within a case study design was conducted. Semi-structure interviews were held with four parents and four teachers who were purposely sampled from four regular primary schools. The interviews were supplemented with informal observations and information from documents. The results of the interviews show that parents and teachers did not share much information on what children were learning in school, which they needed to do. The findings also show that parents did not initiate to visit the schools and take an active role in the schoolwork of their children. Parents need information, guidance and encouragement from teachers on the importance of supporting the schoolwork of their children. Parents expressed concerns of difficulties to look after their children with mental retardation, and teachers also expressed sentiments of over enrolment in their classroom. Both parents and teachers expressed positive sentiments about inclusion of children with mental retardation in regular classes and willingness to collaborate. Studies reveal that teachers who utilize parental involvement experience positive attitudes towards parents, and feel that parental support is very useful. Concerning future collaboration; both parents and teachers suggested embarking on visitations. Teachers suggested assigning continuous homework to children, workshops and seminar for both parents and teachers to sensitize the importance of collaboration between them in the education of their children with mental retardation. Although the study involved only four parents and four teachers in four schools in Kabwe and Kapiri-mposhi districts; the findings may or may not be applicable to other situations in other school that were not part of the sample. The findings may also be useful to all the teachers, Head teachers in schools where children with special needs are being included.¹⁰⁴

Section IV: Studies related to effect of structured teaching in the management of common mental health problems in primary school children.

Research carried out over more than 30 years demonstrates that teacher will adopt an innovation to the extent that first addresses their concern about changes asked of them in class room management and practice and then addresses the impact on the students. Without meeting the first requirement, new practices, no matter how innovative are unlikely to be adopted and sustained.¹⁰⁵

A study was conducted in US Between 1986 and 1989. The centers for Disease Control and Prevention Sponsored the samples (50000 students and 150 teachers in seven states) where evaluation of the teenage health teaching module and a comprehensive school health curriculum for grades 7 to 12 was done. The evaluation demonstrated improvements in health related knowledge, attitude and self reports of some behavior. One of the most significant finding was that teacher training was a crucial factor in the use of curriculum in the students outcome. An untrained teacher did not share the same gain.¹⁰⁶

A study was conducted in the state of Madhya Pradesh, India, that research is being put into practice through teacher empowerment project. As many as 500 teachers per day (at first 23 school district and now moving into 45 districts and 77000 schools) attend seminars in which they develop new learning material and strategies and provide peer demonstration. The focus is on giving teacher decision making power, thereby enabling them to control the changes in their class room and build their self-confidence and status in the community. The project is coupled with a seminar for local education official and school heads and low cost improvement in school environments. Preliminary results point to large increase in attendance and learning retention among

students as well as increased empowerment, participation and satisfaction among teachers.¹⁰⁷

A study was conducted in US. The result of this finding and other confirmatory research at the centers for Disease Control and Prevention, requested the United States Congress for appropriate substantial funding to enable national, state and local health and educational organisation to work together to strengthen the school health, build the capacity of state and local education agencies to organise and develop comprehensive school health programme, monitor the extent to which the young people practice important health related behavior and establish training and demonstration programme, including a network of 58 centres that provide teacher training in every state and territorial education agency in the largest urban school system. Since its inception the network had trained hundreds of thousands of elementary and high school teachers.¹⁰⁸

A study was conducted in Salem to evaluate the effectiveness of planned teaching programme on knowledge of school teachers regarding management of hyperactive students. The sample selected for the study was a cohort group of 40 teachers, teaching from 1st to 7th standard of selected private schools. A structured questionnaire with 40 items to assess the knowledge was prepared and pre-test was conducted on 1st day, after obtaining the written permission. Planned teaching programme in the same day after pre-test and the post-test was conducted on the 9th day. The study result revealed mean difference between pre-test (14.6) and post-test score (30.5) and the difference was significant ($t=16.03$, $p<0.01$).¹⁰⁹

A clinical study was conducted in Ranchi. To assess the effectiveness of planned teaching programme for the care takers of children admitted with minor mental health disorders in the Child Psychiatry wards of Central Institute of Psychiatry. A total of 80 samples was selected by convenient sampling technique. The outcome of the study

proved marked increase in the knowledge level of the caretakers after the intervention.¹¹⁰

A study was conducted in Karachi, Pakistan, to increase in teacher knowledge about ADHD after a week-long training program. A teacher training program for ADHD was designed and a pilot project run in 3 school. The study reveals that 49 teachers all of whom were women, completed the questionnaires before and after the training program, and 35 of them filled it out at the 6 month interval. Mean scores of these tests were compared using a paired t-test. The authors found the difference of mean score of 1.48 ± 2.59 , and this was statistically significant ($P < .005$). The authors conclude that the workshop improved the knowledge of the school teacher regarding ADHD symptomatology and it remained significant even after 6 months of training.¹¹¹

A study was conducted to identify the clinical effectiveness of different parenting and school programme for children with conduct disorders. A systematic review of randomized controlled trial method was used. Meta analysis and qualitative synthesis were used to summarize the studies. The study was concluded that both parents and school teachers' reports of outcome showed significant differences favoring the intervention group. So parenting and school programme are an effective treatment for children with conduct problems.¹¹²

A study was conducted on impact of early school-based screening and intervention programs for ADHD on children's outcomes and access to services using population-based 5-year follow-up of a randomized school-based study. Children between 4 and 5 years of age with high teacher-rated hyperactivity/inattention scores were selected. Follow-up data was collected on 487 children in 308 schools. Following screening, using a 2 x 2 factorial design, schools randomly received an educational intervention (books about ADHD for teachers), the names of children with high

hyperactivity/inattention scores between ages 4 and 5 years (identification), both educational intervention and identification, or no intervention. Tools used to assess the outcomes were Parent-rated hyperactivity/inattention, impairment in classroom learning, and access to specialist health services for mental health or behavioral problems. The major findings of the study was that none of the interventions were associated with improved outcomes. However, children receiving the identification-only intervention were twice as likely as children in the no-intervention group to have high hyperactivity/inattention scores at follow-up (adjusted odds ratio, 2.11; 95% confidence interval, 1.12-4.00). Regardless of intervention, high baseline hyperactivity/inattention scores were associated with high hyperactivity/inattention and specialist health service used at follow-up. Further the study concluded that, there is no evidence of long-term, generalizable benefits following a school-based universal screening program for ADHD. There may be adverse effects associated with labeling children at a young age.¹¹³

A study conducted on identification of children at risk of Attention Deficit/Hyperactivity Disorder at University of Bristol, UK using before and after investigation of an educational intervention about ADHD for teachers took place in 6 primary schools (involving 96 class teachers and 2672 pupils). Teacher recognition was compared against a diagnostic algorithm for ADHD caseness that utilized both parent and teacher ratings. Changes in teacher recognition of children with probable ADHD, as well as predictors of recognition, were examined and it was found that following the intervention, there was an increase in the proportion of children regarded by teachers as having probable ADHD. There was also improved agreement between teacher recognition and the diagnostic algorithm. Teacher views that a child had probable ADHD were based on both the severity of symptoms and the impact of these problems on the teacher and the class. Further the study concluded that it is feasible to deliver an educational intervention addressing teacher identification of ADHD in routine practice.

This was associated with an improvement in the ability of teachers to more accurately identify children at risk of ADHD. The provision of a brief educational intervention for teachers could assist in improving the identification of undiagnosed children with ADHD in the community.¹¹⁴

A study carried out on preventing conduct problems and promoting social competence. The aim of the study was to find effectiveness of parent and teacher training as a selective prevention program for 272 Head Start mothers and their 4-year-old children and 61 Head Start teachers. Fourteen Head Start centers (34 classrooms) were randomly assigned to (a) an experimental condition in which parents, teachers, and family service workers participated in the prevention program (Incredible Years) or (b) a control condition consisting of the regular Head Start program. Assessments included teacher and parent reports of child behavior and independent observations at home and at school. Construct scores combining observational and report data were calculated for negative and positive parenting style, parent-teacher bonding, and child conduct problems at home and at school, and teacher classroom-management style. Parent-teacher bonding was significantly higher for experimental than for control mothers. Experimental children showed significantly fewer conduct problems at school than control children. Children of mothers who attended 6 or more intervention sessions showed significantly fewer conduct problems at home than control children. Children who were the "highest risk" at baseline showed more clinically significant reductions in these behaviors than high-risk control children. After training, experimental teachers showed significantly better classroom management skills than control teachers.¹¹⁵

A cluster randomized trial on mental health first aid training for high school teachers. Mental disorders often have their first onset during adolescence. For this reason, high school teachers are in a good position to provide initial assistance to students who are developing mental health problems. To improve the skills of teachers

in this area, a Mental Health First Aid training course was modified to be suitable for high school teachers and evaluated in a cluster randomized trial. The training increased teachers' knowledge, changed beliefs about treatment to be more like those of mental health professionals, reduced some aspects of stigma, and increased confidence in providing help to students and colleagues. Mental Health First Aid training has several positive effects on teachers' mental-health-knowledge, attitudes, confidence and some aspects of their behavior.¹¹⁶

A study was conducted in Karolinska Institute, Sweden, to find the effectiveness of social and emotional training in schools for the promotion of mental health. Quasi-experimental longitudinal design, with two intervention [Social and Emotional Training (SET) program] and two control schools were adopted. A wide range of instruments, both Swedish and international, were employed. The major finding of the study with regard to the impact of the program on mental health are generally favorable in particular through the promotion of aspects of self-image, including well-being and the hindering of aggressiveness, bullying, attention-seeking and alcohol use. There was, however, no differential effect on social skills. It seems that SET has the potential to operate effectively as a health-promoting intervention during the school period, although its main impact may rather be to act as a brake on the deterioration in some aspects of mental health that is common during adolescence. Positively significant relationships were found on some but not all of the instrument scales, and effect sizes were medium.¹¹⁷

Section V: Studies related to effect of Self Instructional Module in the management of common mental health problems in primary school children.

A study was done to investigate the effectiveness of a series of instructional modules (SIMs) for training secondary-level social studies teacher-trainees to develop and ask higher-level questions. Forty Samples were enrolled for social studies method, courses were blocked on pre-test scores and randomly assigned to treatment groups. The experimental group treatment consisted of using only four SIMs for 6 weeks. Three control group instructors employed conventional classroom instructional techniques. The data indicated that the experimental group achieved significantly higher achievement test scores and student teaching performance ratings. Additionally, the experimental group expressed favorable attitudes toward the use of the SIMs. Based on this data, the use of SIMs appears to be superior to more conventional instructional methods for developing concepts and skills essential to instruction for higher cognitive processes.¹¹⁸

An evaluation study was conducted in Venezuela, to find the effectiveness of five self-instructional modules. The modules were used for diagnostic perspective reading instruction, word recognition skills, the informal assessment of reading difficulties and the correction of reading difficulties. Results from the evaluation showed that the modules were suitable for the intended purpose.¹¹⁹

Child and adolescent mental health disorders are present in around 10% of the population. Research indicates that many young people possess negative attitudes towards mental health difficulties among peers. Two-group pre-test-post-test control group study in two English secondary schools was conducted. Experimental Group (School E) received a six-lesson teaching intervention on mental health; Control Group

(School C) did not. Participants were 14- and 15-year-old pupils. The intervention consisted of six lessons on mental health issues common to young people: stress; depression; suicide/self-harm; eating disorders; being bullied; and intellectual disability. School C was given access to these lesson plans and materials on completion of the study. Understanding was measured at two time points, Time 1 (T(1)) and Time 2 (T(2)), 8 months apart, by a Mental Health Questionnaire. Behavioral, emotional and relationship strengths and difficulties were measured by the self-rated Strengths and Difficulties Questionnaire (SDQ) with five subscales: hyperactivity, emotional symptoms, conduct problems, peer problems and prosocial behavior. At T(2), pupils in School E compared with those in School C showed significantly more sensitivity and empathy towards people with mental health difficulties. There was a significant reduction in SDQ scores on conduct problems and a significant increase on prosocial behavior among School E pupils compared with controls. Pupils valued the intervention highly, in particular the lessons on suicide/self-harm.¹²⁰

A randomized controlled trial study was conducted in Australia on mental health first aid training by e-learning. 262 members participated in the study. Participants were randomly assigned to complete an e-learning CD, read a Mental Health First Aid manual or be in a waiting list control group. The effects of the interventions were evaluated using online questionnaires pre and post training and at 6-months follow up. The questionnaires covered mental health knowledge, stigmatizing attitudes, confidence in providing help to others, actions taken to implement mental health first aid and participant mental health. Both e-learning and the printed manual increased aspects of knowledge reduced stigma and increased confidence compared to waiting list. E-learning also improved first aid actions taken more often than waiting list, and was superior to the printed manual in reducing stigma and disability due to mental ill health.¹²¹

An experimental study was carried out in U.S. Army Combat Medic School to assess the effectiveness of an adult-learning, self-directed model compared with traditional lecture-based teaching methods in out-of-hospital training on two sequential groups of randomly selected junior, enlisted, active duty soldiers with no prior formal emergency medical training who were enrolled in an experimental model of a the control population with a similar group of students enrolled in the traditional curriculum. Instructors were drawn from the same pool, with experimental group instructors receiving two weeks of training in adult-learning strategies. The study population was enrolled in the experimental program that emphasized the principles of adult learning, including small-group interactive approach, self-directed study, multimedia didactics, and intensive integrated practice of psychomotor skills. Instructors and students were also surveyed at the end of the course as to their confidence in performing four critical skills. The survey instrument used a five-point scale ranging from "strongly disagree" through "undecided" to "strongly agree." Proficiency for this survey was defined as the sum of the top two ratings of "agree" or "strongly agree" to questions regarding the particular skill. Both experimental and control programs lasted ten weeks and covered the same academic content and non-academic (e.g., physical fitness) requirements, and the two groups of students had similar duty days. Evaluations included performance on internal and National Registry of Emergency Medical Technicians (NREMT) written examinations and other measures of academic and nonacademic performance. The study found that one hundred fifty students (experimental $n = 81$, control $n = 69$) were enrolled in 1999-2000. The scores for internal course grade, NREMT written score, and NREMT written pass rate were, respectively, 86.3, 71.6, and 63% for the experimental group; and 85.8, 69.6, and 49% for the control group. The p -value was ≤ 0.05 for the comparison between internal course grade and NREMT written score, but $p > 0.05$ for the comparison between NREMT written pass rates.

Students in both the adult-learning and traditional groups rated themselves high in proficiency, whereas instructors in the traditional group were generally much more modest in their rating of student proficiency than instructors of the adult-learning program. The study concluded that an adult-learning model offers only a modest improvement in cognitive evaluation scores over traditional teaching when measured at the end of the course. Additionally, students in the traditional teaching model assess themselves as proficient, more frequently than instructors, whereas instructor and student perception of proficiency more closely matched in the adult-learning model.¹²²

There are not many studies done about knowledge of primary school teachers in the area of mental health problems among school children. The review of literature suggest that training of primary school teachers should be integral to all services in helping improve their understanding and improve their skills in detecting mental health problems, and develop strategies to achieve this. Structured teaching programme and a Self-Instructional Module on selected common mental health problems would be beneficial to primary school teachers in increasing their knowledge.

The present study is an attempt to study the emotional problems in terms of thought disorder, anxiety, withdrawal, depression, noncompliance, somatic concerns, hyper activity, physical aggression, low self-esteem as consequences of learning difficulties, using teacher ratings in lieu of the trends observed in research.

An attempt has been made to study the extrinsic causes of learning difficulties. Research being sparse in both western and Indian settings this study would add to understanding of the child's difficulties both in achievement in academics and emotion stability.

Summary

Researcher usually undertakes a thorough literature review to familiarize himself with the knowledge base. Literature reviews are undertaken for many purposes. Nevertheless a good literature review regardless of length requires thorough familiarity with available evidence. A literature review helps to lay the foundation and provide context for a new study. By doing a thorough review researcher can determine how best to make a contribution to the existing base of evidence. Even the reviewer of literature identifies the gaps and inconsistencies in a body of research and can find whether a replication with a new study population is the right step. Reviewing the literature can also help to identify relevant conceptual framework or appropriate research methods. A review also plays a role at the end of the study as researchers try to make sense of their finding. Conducting a high quality literature review is more than a mechanical exercise. It is an art and a science. The purpose of review of literature is to discover what is already known and what others have attempted to find out. Therefore, an intensive review of literature has been done from published and unpublished thesis, project, researches, dissertation international, national, regional government and non-governmental reports and journals and e journals for the purpose of systematic compilation. The review of literature has been presented as follows.

Section I: Describes the studies related to common mental health problems in Primary school children.

Seggane Musisi, Eugene Kinyanda investigated the emotional and behavioral problems of children who are orphans and non-orphans in primary school.¹² Rabbani MG, Hossain MM Surveys reported that the data on the prevalence and correlates of behavior disorders in children.¹³ al-Kuwaiti MA, Hossain MM, Absood GH conducted a

study to estimate the prevalence of behavior disorders and to determine whether and how these were associated with the age, gender, nationality, grade and scholastic performance of the children.¹⁴ Ellin Simon and Susan Maria Bögels investigated the usefulness of screening for anxiety disorders by children's self-report of anxiety symptoms on a questionnaire.¹⁵ Naila Z Khan conducted a study to determine the prevalence of child behavior problems reported by parents.¹⁶ Lanzi G, Zambrino conducted a study to assess the prevalence of tic disorders among primary school children.¹⁷ Adams JW, Snowling conducted a study to find out the relationship between behavioral problems and academic attainment in a large UK primary school.¹⁸ Malhotra S, Arun P, Kohli assessed the Psychiatric morbidity in Indian primary rural school children.¹⁹ Kafle PP, Vaidya L, Panta PP, Chhetri MR, Mehrotra S conducted a study to find out morbidity in habit disorders and common behavior problems in age group of 6-10 years.²¹ Sherr L, Bergenstrom A, Mccann E conducted an audit of a school-based counseling provision for emotional and behavioral difficulties in primary school children.²⁴

Beyer T, Furniss T. carried out a study to assess the psychiatric symptoms in primary school.²⁷ Jennifer Evans, Angela Harden and James Thomas, their article describes the processes and findings of a systematic review of research into the effectiveness of strategies to support pupils with emotional and behavioural difficulties (EBD) in mainstream primary schools.²⁹ Ciliska, D., Beyers, J., Vohra conducted a study to determine the prevalence of possible eating disorders and inappropriate eating behaviors in school children.³¹ Srinath S, Girimaji SC, Gururaj G, Seshadri S, Subbakrishna DK, Bhola P conducted an epidemiological study on child and adolescent psychiatric disorders in urban and rural areas of Bangalore.²⁰ Syed EU et al. Cross sectional study was conducted in selected private and community schools to find out screening for emotional and behavioral problems among 5-11 year old children.³⁴

PP Kafle, L Vaidya, PP Panta, MR Chhetri and SK Mehrotra conducted a study to find out morbidity in habit disorders in age group of 6-10 years.³⁵

Syed EU, Hussein SA, Haidry SE determined emotional and behavioral problem among school going children in Pakistan.³⁶ Glazebrook C, Hollis C, Heussler H, Goodman R, Coates L prevalence survey was conducted to determine whether children attending general pediatric outpatient clinics were at increased risk of suffering from emotional and behavioral disturbance Participants were 307 children aged 5-15 years.³⁷ Ahmad Ghanizadeh evaluates onychophagia or nail biting (NB) prevalence and association with mental health of a community sample of children.³⁹ Sujit Sarkhel, Vinod Kumar Sinha, Manu Arora, Pushpal DeSarkar conducted a study in 2006 on prevalence of conduct disorder in school children of Kanke.⁴⁰ Matsuura M, Okubo Y, Kato M, Kojima T, Takahashi R, Asai K, Asai T, Endo T, Yamada S epidemiological studies were conducted on emotional and behavioral of problems primary school children.⁴⁵ Ibrahim Abdelrahim Ibrahim Humaida Epidemiological studies suggest that there is a prevalence of conduct disorder in children between the ages of 5 and 10 years, the aim of this research was to investigate conduct disorder among pupils of primary schools.⁴³ Ronald T. Brown, Wendy S. Freeman, and James M. Perrin provide research literature relating to the prevalence of attention-deficit/hyperactivity disorder in primary school children.⁵² Amr Ahmed Sabra conducted a study to determine the prevalence of Attention Deficit Hyperactivity Disorder in primary school children.⁵⁴ Handwerk ML, Marshall RM conducted a study to assess the behavioral and emotional problems of children with learning disabilities (LD), and serious emotional disturbances.⁵⁸ Scott S. conducted a study to assess the prevalence of tic disorders among primary school children.⁶⁰

Section II: Describes the studies related to the effect of school mental health programme in the management of common mental health problems in primary school children.

Hegde A, Shetty A. conducted a cross-sectional study in 40 schools in Karkala Taluk, Karnataka to evaluate whether they met the 10 criteria of Child Friendly School initiative as recommended by Indian Academy of Pediatrics.⁶⁴ Ibeziako PI, Omigbodun OO, Bella TT A conducted a study on assessment of need for a school-based mental health programme in Nigeria: perspectives of school administrator's states that, majority of children in Nigeria are unable to access mental health services.⁶⁵ Short KH, Weist MD, Manion IG, Evans SW. Tying A study conducted on tying together research and practice using ROPE for successful partnerships in school mental health.⁶⁶ Joseph A. Durlak, Roger P. Weissberg This article presents findings from a meta-analysis of 213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergartens through high school students.⁶⁷

Victorian Department of Premier. The purpose of this study was to provide a program description to inform the development and delivery of school-based early intervention programs for primary school children with challenging and difficult behaviours and/or emerging conduct disorder. Early Action Programs (CAESA) reflects the international trend to address problems early to minimise distress and the negative impacts of behavioural problems and disorders on the lives of children.⁶⁸ National Institute for Health and Clinical Excellence A study was conducted to provide a comprehensive programme to help develop children's social and emotional skills and wellbeing.⁷⁵ Dalle Grave R, De Luca L, Campello G A study was conducted to evaluate the efficacy of a new school-based eating disorder prevention program designed to reduce dietary restraint and the level of preoccupation with regard to shape and weight.

⁷⁸ Pokrajac-Bulian A, Zivčić-Becirević I, Calugi S, Dalle Grave R. A study was conducted to evaluate the efficacy of a school based program of eating disorder prevention on a sample of young adolescents in Croatia. ⁷⁹

Section III: Studies related to knowledge and skill of teachers in the management of common mental health problems in primary school children

Maria Poulou, conducted a study to identify the types of emotional and behavioural difficulties that Greek primary teachers saw as problematic in their teaching; and also to identify their perceptions of the prevalence of these difficulties. ⁸¹ Clea J. Headley, Marilyn A. Campbell, conducted a study to investigate the ability of primary school teachers to recognise and refer children with anxiety symptoms. ⁸² Srikala Bharath, KV Kishore Kumar, YP Mukesh studies were conducted in NIMHANS. Child Mental Health teams' effect on teachers' knowledge of children's exposure to family risk factors was examined using the Family Risk Factor Checklist-Teacher. ⁸³ Laing, A. and Chazan, M Study was conducted in the sample of 23 class teachers and 21 head teachers, in one UK local education authority. ('what comes to mind when there is talk of behaviour difficulties'). ⁸⁶ Elton report: The Committee of Enquiry into Discipline in Schools conducted the largest structured survey ever carried out in Britain concerning teachers' perceptions of problem students, both in primary and secondary schools. ⁸⁸

Shah H, Kumar D: A study conducted on sensitizing the teachers towards school mental health issues: An Indian experience states that the School Mental Health (SMH) services play critical roles fostering positive mental health and helping children with psychological problems. ⁹⁰ Webster-Stratton C, Jamila Reid M, Stool Miller M: A study was conducted in USA on Preventing conduct problems and improving school readiness. ¹⁰²

Section IV and V: Describes the studies related to effect of Structured Teaching and self-instructional module in the management of common mental health problems in primary school children

Aaro L E Research carried out over more than 30 years demonstrates that teacher will adopt an innovation to the extent that first addresses their concern about changes asked of them in class room management and practice and then addresses the impact on the students.¹⁰⁴

Fishbein M Between 1986 and 1989, the US centers for Disease Control and Prevention Sponsored the first large scale (50000 students and 150 teachers in seven states) evaluation of the teenage health teaching module which is a comprehensive school health curriculum.¹⁰⁵

King AJ: In the state of Madhya Pradesh, India, this research done is being put into practice through teacher empowerment project.¹⁰⁶ Sailaxmi B. A study was conducted in Salem to evaluate the effectiveness of planned teaching programme on knowledge of school teachers regarding management of hyperactive students.¹⁰⁸ Merwin, William C, Donald O, Schneider: A study was conducted to investigate the effectiveness of a series of instructional modules (SIMs) for training secondary-level social studies teacher-trainees to develop and ask higher-level questions.¹¹⁷

**“Research is to see what everybody else has seen and to think what nobody else
has thought”**

Albert Szent-Gyorgyi



CHAPTER III

METHODOLOGY

3.1.1 Research Approach

An evaluative approach was adopted to assess the effectiveness of structured educational modules on Primary School Teachers knowledge and skills in identification of common mental health problems of primary school children.

3.1.2 Research design

The research design chosen for the present study was quasi experimental with three group pre-post-test design. By using probability, stratified cluster sampling, 360 Primary School teachers were selected to assess the effectiveness of structured teaching modules.

Pre-test	Treatment	Post-test
Knowledge and Skill	Structured teaching Programme (STP) & Self-Instructional Module (SIM)	Knowledge and Skill
(O ₁)	(X)	(O ₂)

Figure 2: Schematic representation of Research Design.

The symbols are described as under:

O₁ – Refers to Pre-test measures of knowledge & practice of subjects

O₂ – Refers to post-test measures of knowledge & practice of subjects

X : Structured Teaching Module on lifestyle modification of diabetes patients.

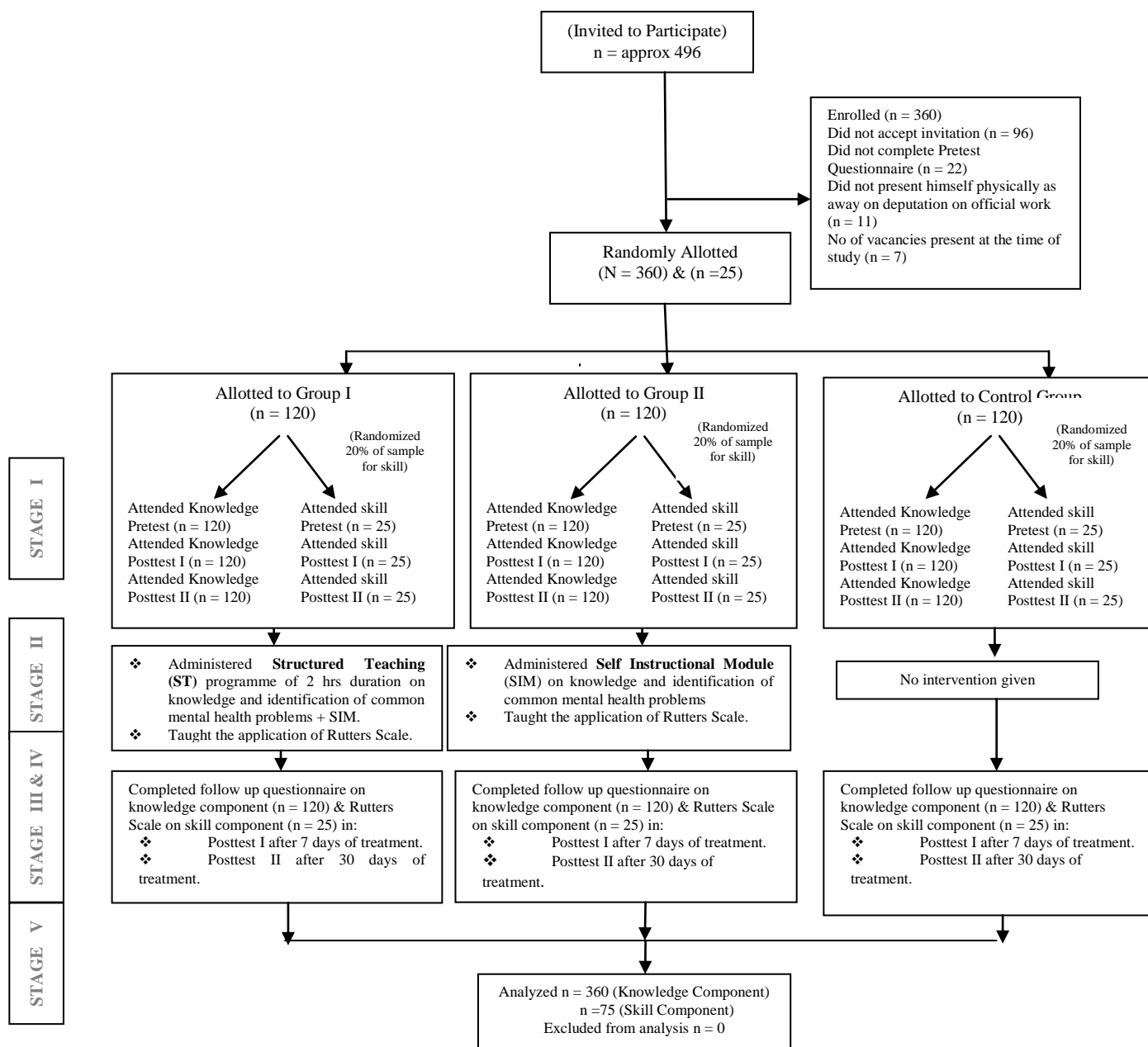


Figure 3: Flow diagram showing the schematic progress.

3.2. Variables under study

3.2.1. Independent variable [I.V.]

- ❖ Structured Teaching [ST]
- ❖ Self-Instructional Module [SIM]

3.2.2. Dependent variable [D.V.]

- ❖ Knowledge
- ❖ Skill

3.2.3. Co-variables [C.V.]

Age, gender qualifications, years of experience, health education training and exposure to in-service education type of family, marital status, family size, number of dependents, family income, native place.

3.3 Population of the study

Population of the study comprised of primary school teachers working in government and government aided primary schools of a Taluk, Bangalore Dist, Karnataka.

3.4 Sample

Sample of the study comprised of 360 Government Primary School Teachers working in a Taluk and who met the inclusion criteria.

3.4.1 Criteria for selection of sample

3.4.1.1 Knowledge Assessment.

Inclusion criteria: Teachers,

- Who give consent to the study

Exclusion criteria: Teachers,

- From high school
- On long leave (on personal grounds)
- From one teacher schools.

3.4.1.2 Skill Assessment

Inclusion Criteria: students,

- Age 4-11 years
- Teacher should have known the child for at least 6 months

Exclusion criteria: Students,

- Who were not available during the period of data collection.

3.4.2 Sampling Technique:

Stratified random sampling was used to select and allot the subjects for the study to Group I, Group II and control group. Initially the entire list of teachers working in the Taluk was obtained from the service register. Later 3 different lists containing the names of teachers according to the staffing pattern of the school was prepared from the service register.

Stratified random sampling was used to select the samples of this study. Initially, the entire list of teachers working in Anekal Taluk was selected for the study. Later four different lists containing the name of teachers according to staffing pattern of the school was prepared from the service register in the following manner.

i.e., Schools with 2 teachers, 3 teachers, 4 teachers & 5 teachers.

There were 109 schools with 2 teachers each. Hence 218 teachers were selected.

There were 10 schools with 3 teachers each. Hence 30 teachers were selected.

There were 37 schools with 4 teachers each. Hence 148 teachers were selected.

There were 20 schools with 5 teachers each. Hence 100 teachers were selected.

There were 496 teachers in total. All 496 teachers were invited to participate in the study. However, 96 teachers did not accept the invitation, 22 teachers did not complete the pre-test questionnaire, 11 teachers were absent due to deputation on official work and 7 teachers posts were vacant. Hence, 136 teachers were not included in the study. Thus 360 teachers were short listed to participate in the study. With the help of computer generated random number table 120 teachers were selected and allotted to Group I, 120 teachers were selected and allotted to Group II & 120 teachers were selected and allotted to form control group.

3.5 Setting of the study

The study was undertaken in Anekal Taluk of Bangalore Urban district of Karnataka State. The Department of Education has divided the Taluk into 16 clusters for the convenience of administration. Out of the 16 clusters, one cluster is Urdu cluster; hence this cluster was not included in the present study. A total of 903 teachers are present in these 15 clusters selected for the study. Each cluster consists of 12-23 schools. There are in total, 248 lower primary schools teachers and 253 higher primary schools teachers in these clusters. Further the number of teachers working in each school was not the same. There were schools with 2-teachers, 3-teachers, 4-teachers and 5-teachers. In each zone, meetings are held regularly every month on fixed dates. School Inspectors and school teachers of that particular zone, along with Block Education Officer/Asst. Education Officer attend the meetings. Activities during these meetings include academic discussions, lectures and demonstrations of innovative teaching methods and science experiments by the senior teaching faculty. The study was planned to carry out during monthly and zonal meetings. The selection of the Taluk is done on the basis of (a) geographical proximity, (b) feasibility of conducting the study

and (c) availability of sample subjects. Out of 496 teachers were shortlisted for the study. However, only 382 gave their consent to participate in the study. 96 did not accept the invitation, 22 did not complete pre-test questionnaire; 11 did not present themselves physically as they were away on deputation for official work; 7 posts were vacant hence not available at the time of study.

Out of these 360 subjects, 120 were selected and assigned randomly to form Group I; 120 were selected and assigned randomly to form Group II and 120 were selected and assigned randomly to form the Control group.

3.6 Ethical Consideration

Prior permission was obtained from the relevant authorities - Deputy Director of Public Instruction (DDPI), Government of Karnataka and Block Education Officer (BEO) of the Taluk, Government of Karnataka. The nature and objectives of the study were explained in the local vernacular. Confidentiality and anonymity was assured, later Informed written consent was obtained from subjects of the study. The teachers were willing to co-operate and participate in the study.

3.7. Selection and Development of Instrument

3.7.1 Selection of the tool

To assess the knowledge, self-administered knowledge questionnaire was developed and to assess the skill component of the subjects Rutter's Scale was used. It is considered to be the most appropriate tool to elicit responses from literate subjects:

3.7.2 Development of the tool

In order to develop the said tool, the following activities were conducted.

- ❖ Literature review
- ❖ Consultation and discussion with nursing experts.

- ❖ Personal experience and discussion with colleagues.

A blue print was prepared prior to the construction of the questionnaire which showed the distribution of items according the content area. Following that, items for the self-administered knowledge questionnaire were developed, and put in a logical order.

3.7.2.1 Self-administered knowledge questionnaire

The instrument was developed after the discussion with experts in the field like, the guide, co guide, research advisory committee member, and search for developing instruments was also done through internet, journals, books and other materials. The Instruments are divided into:

Socio Demographic Schedule: Refers to demographic profile of the subjects, which included age, marital status, gender, religion, type of family, number of dependents, education level, family income, socio economic status, awareness, health education training, exposure to in-service education and source of information. The personal characteristics profile consisted of 13 items.

Knowledge component: Self-administered knowledge questionnaire to assess the knowledge of subjects on common mental health problems was used. Self-administered knowledge questionnaire on common mental health problems consisted of 60 items under the following headings:

- Emotional disorder (10 items).
- Conduct disorder (10 items).
- Hyper kinetic disorder (10 items).
- Developmental disorder (10 items).
- Eating disorder (10 items).
- Habit disorder (10 items).

Skill Component: Rutter's scale was used to test the skill component of the subjects. Rutter's scale Proforma B for identification of common mental health problems of primary school children was used. The teachers were given training on how to use this scale on children. Proforma B consists of 26 description of behavior. It had an overall score of 52.

3.7.3 Content Validity of the tool

Content validity of the tool was established after consulting national and international experts in nursing, public health, and education. The suggestions given by the experts were incorporated in discussion with guide and co-guide. Later, the tool was edited by English language experts and translated into Kannada language and back translation was done to compare and validate both versions, without changing the meaning of the content of the tool. Thus, it was found to be valid and suitable.

3.7.4 Pre-testing of the tool

Pre-testing of the tool was done on a sample of 36 subjects who were similar in characteristics to those of the subjects under study, to check the clarity of the items, their feasibility and practicability.

3.7.5 Reliability of the tool

Reliability of the tool was established by conducting pilot study. The reliability of knowledge was tested by test-retest method, the score was ($r=0.835$). The skill scale has been shown to have a high test retest reliability of 0.79 over a three month period and inter rater reliability of 0.72.

3.7.6 Scoring and Interpretation

3.7.6.1 Self-administered Knowledge Questionnaire.

Section - 1 :

Included 13 items related to the demographic variables of the subjects.

Section - 2:

Consisted of 60 items to assess the knowledge before and after administering intervention package (ST + SIM, SIM). All the 60 items were scored. Each correct answer was given a score of 'one' and wrong answer assigned a score of 'zero'.

Section - 3:

Rutter's Scale. Proforma B consists of 26 descriptions of behavior against which the teacher has to indicate whether such descriptions 'does not apply' 'applies somewhat' or 'definitely applies', to each child. The rating of each child is scored 0, 1, and 2 respectively and the total score obtained by adding up all the scores.

3.8. Intervention package

3.8.1 Intervention package Module I

Structured Teaching [ST] of two-hour duration on causes, detection and prevention of common mental health problems of primary school children prepared for primary school teachers to enhance the knowledge and skills in identification of common mental health problems. The tool was sent to 11 experts for validating the contents. Suggestions given were incorporated and sent again to 11 experts. Based on their agreement, Module I was finalized. Later the tool was edited by English language experts and translated into the local vernacular (Kannada) by Kannada language experts. It was found to be valid and suitable for primary school teachers.

3.8.2 Intervention package Module II

Self-Instructional Module [SIM] prepared for primary school teachers to enhance the knowledge and skills in identification of common mental health problems was module I (structured teaching) only.

3.9. Development of Structured Teaching Programme

Effort was made to develop a structured teaching programme based on knowledge and practice in identification of common mental health problems of primary school children by primary school teachers. It consists of the following components:

- ❖ Emotional disorder.
- ❖ Conduct disorder.
- ❖ Hyper kinetic disorder.
- ❖ Developmental disorder.
- ❖ Eating disorder.
- ❖ Habit disorder

The above teaching programme was developed after extensive review of literature in addition to a series of consultation with experts in the field. Randomly a few primary school teachers were also interviewed in order to know their needs regarding the knowledge and practice area, concerning common mental problems of children. This helped the investigator to appropriately develop a teaching programme for the study subject.

While preparing the teaching programme, simplicity of language and content coverage of the common mental health problems of school children were taken into consideration. Care was taken to avoid technical words.

3.10 Content validity of the structured teaching programme

Content validity of the structured teaching programme was validated by a few experts in the field of nursing, psychiatry, psychology, psychosocial work, public health and education. Suggestions given by experts were incorporated in finalizing the structured teaching programme which was translated into local vernacular Kannada by an expert.

3.11 Pilot Study

Pilot study was conducted in Bangalore North District, which is situated close to Bangalore, 36 primary school teachers who fulfilled the inclusion criteria were recruited for the pilot study to test the feasibility of the research tool. The data was subjected for statistical analysis and the results indicated that, pre-test and post-test knowledge scores were found to be significant for the knowledge domain under consideration. The overall enhancement in the score found in the entire knowledge domain, and statistical significance, indicated the effectiveness of structured teaching programme on identification of common mental health problems of primary school children. The skill score between Pre-test and post-test was found to be statistically significant.

The subjects, who were included in pilot study, were excluded from the main study. The results revealed that the structured teaching programme on knowledge and skill identification of common mental health problems of primary school children was effective in gaining knowledge and practice by primary school teachers. This revealed that the study is feasible to conduct.

The following observations were made:

- ❖ Average time taken for administering the tools was 45 minutes.

- ❖ Time taken for intervention package delivery was 45-50 minutes per session/ per group
- ❖ Subjects were comfortable and able to understand ST and each items of the questionnaire.

3.12 Procedure for Data Collection

Formal written permission was obtained from the Deputy Director of Public Instruction (DDPI), Bangalore, Karnataka and Block Education officer (BEO), Anekal Taluk for conducting the study. Informed consent was obtained from the subjects after explaining the nature and purpose of the study. Contamination of the sample was avoided. Getting together during zonal meetings was not there as the zones were geographically situated apart from each other.

The following steps were followed.

- Step I:** Pre-assessment of subjects done on Knowledge and skills in identification of common mental health problems of primary school children in Group I, Group II and Control Group.
- Step II:** Administrated Structured Educational Modules [SEM]: Structured teaching plus SIM for Group I and Self Instructional Module only for Group II and no intervention for Control Group.
- Step III:** Post assessment was done on Knowledge and skills in identification of common mental health problems of primary school children by administering the same tools to Group I, Group II and Control Group on the 7th day and 30th day after treatment.

3.13. Data analysis and organization

Data organization included the edited questionnaire. Data editing was done and corrected. The range checks were performed and the results and analysis are presented in the following order:

Section 1: Socio demographic characteristic details of Primary school teachers.

Section 2: Pre-test knowledge scores and skill scores related to identification of common mental health problems of primary school children.

Section 3: Post-test knowledge scores and skill scores related to identification of common mental health problems of primary school children.

Section 4: Effectiveness of different modes of Structured Educational Module-I [ST + SIM] and Module-II [SIM] between the Groups I and Group II and Control Group of the subjects in identification of common mental health problems of primary school children.

Section 5: Association between knowledge and skills of the subjects in identification of common mental health problems of primary school children.

Section 6: Co-relationship between pre-test and post-test knowledge and skills scores with the socio demographic variables of the subjects in identification of common mental health problems of primary school children.

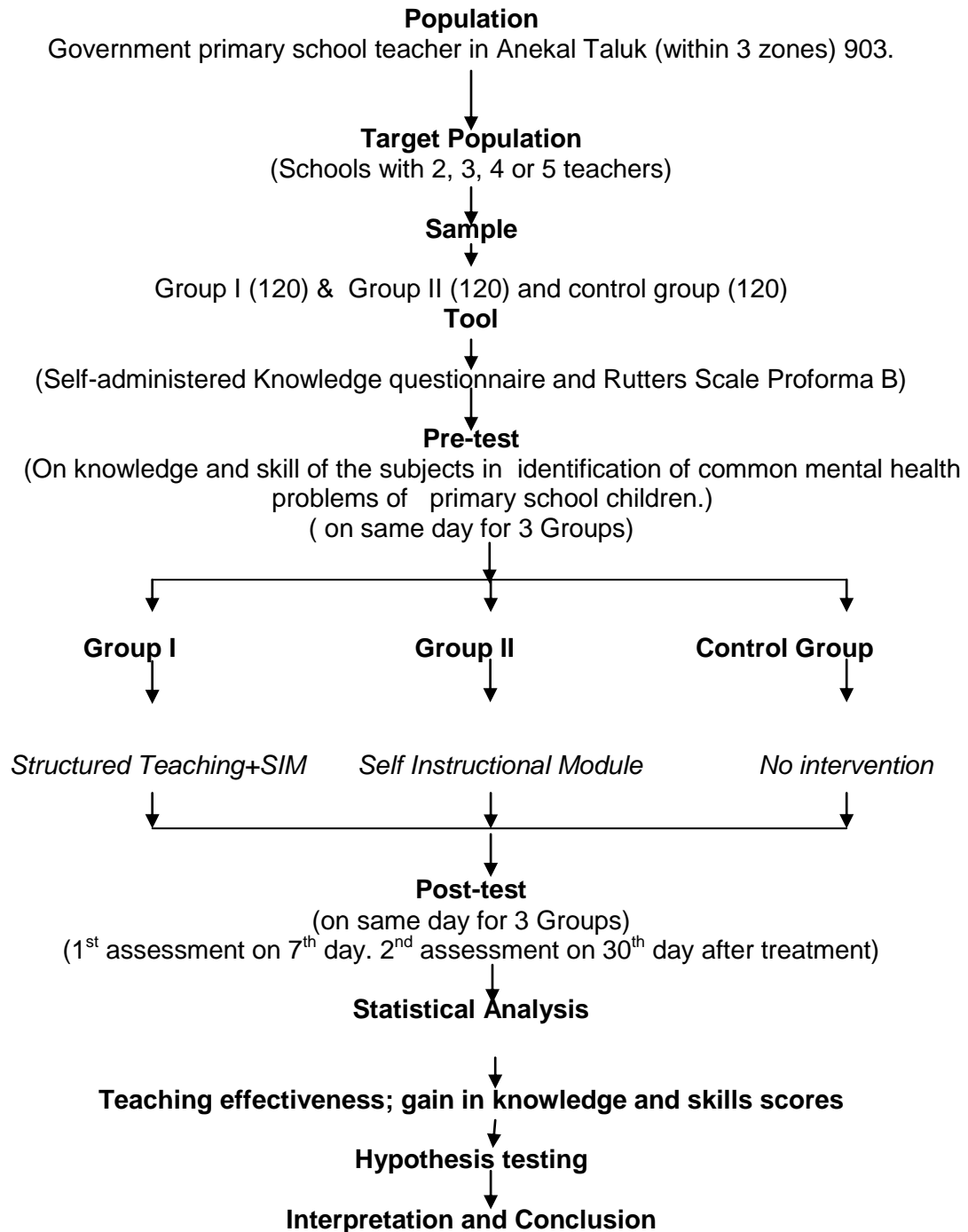


Figure 4: Flow chart showing the steps in collection of data.

Analysis of data

Data collected was edited, tabulated and analyzed using SPSS 17.0 version interpreted by using descriptive and inferential statistics based on the formulated objectives of the study.

Different statistical tests used to analyze the data.

Methods	Types	Purpose
Descriptive Statistics	Frequency, percentage, Mean, Standard Deviation, Median.	To understand the baseline characteristics of the study variables.
Inferential statistics (Parametric)	Independent t test	To study independent of two variables
	Student paired 't' test	To compare mean scores before and after treatment.
Inferential statistics (Non Parametric)	Chi Square test	To find the independent of two attributes.
	Kruskal-wallis Test	To compare the mean scores of more than 2 independent variables
Multivariate Tests	ANOVA (with repeated measures)	To compare mean scores between all three groups accounting for pretest, post-test 1 and post-test 2.
	Post hoc ANOVA	To compare multiple mean score comparisons of three groups.
	Correlation	To find the relationship between study variables.
	Regression	To find functional relationship between scores and personal characteristics.
	Factor Analysis	To understand basic structure of all studied variables.

What is research, but a blind date with knowledge.

William Henry



CHAPTER IV

RESULTS

Analysis is the categorizing, ordering, manipulating and summarizing of data to obtain answers to the research questions. The interpretation of tabulated data can bring light to the real meaning and effectiveness of the findings.

In this study, an evaluative survey approach was adopted to assess the effectiveness of Structured Educational Modules for Primary School Teachers on the Knowledge and Skills in Identification of Common Mental Health Problems in Selected Schools of Bangalore District.

Data collected from 360 selected subjects was edited, tabulated and interpreted by using descriptive and inferential statistics based on the formulated objectives of the study.

The findings are presented under the following sections

Section A: Socio demographic characteristic details of Primary school teachers.

Section B: Pre-test knowledge scores and skill scores related to identification of common mental health problems of primary school children.

Section C: Post-test knowledge scores and skill scores related to identification of common mental health problems of primary school children.

Section D: Effectiveness of different modes of Structured Educational Modules I [ST + SIM] and II [SIM] between the Groups I and II and Control Group of the subjects in identification of common mental health problems of primary school children.

Section E: Association of pre-test and post-test scores of knowledge and skills with selected demographic variables of primary school teachers.

Section F: Correlation of pre-test and post-test knowledge scores with skills scores of primary school teachers.

SECTION I

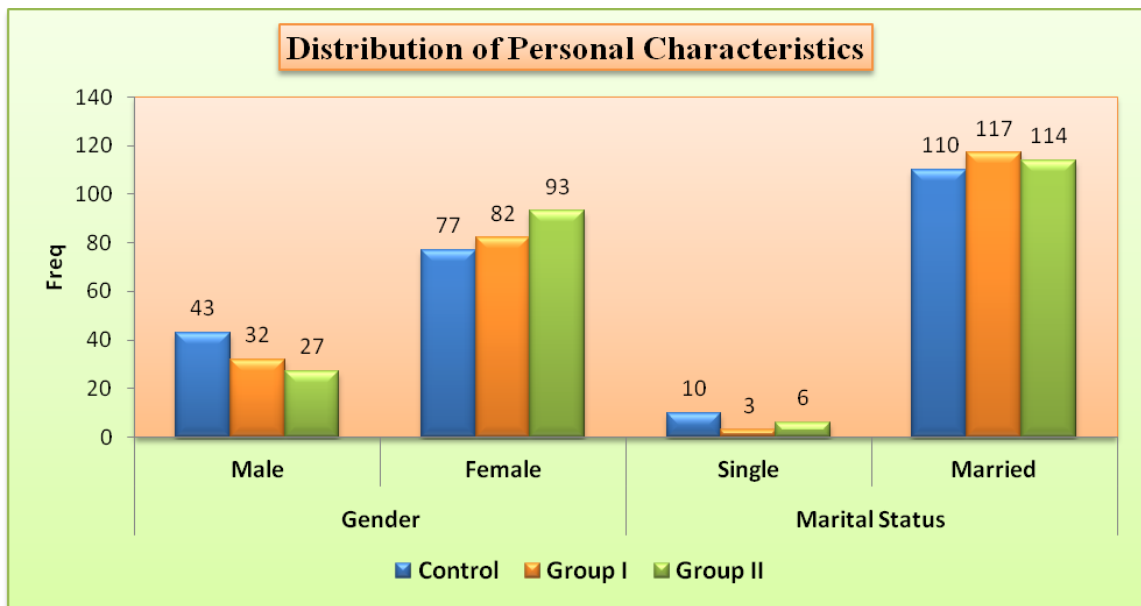
DISTRIBUTION OF DEMOGRAPHIC VARIABLES

Table 1: Distribution of subjects according to their socio-demographic variables.

								N=360
Variable	Parameter	Control		Group I		Group II		Chi-Square Value
		F	%	F	%	F	%	
Gender	Male	43	36	32	27	27	23	4.87 ^{NS}
	Female	77	64	82	68	93	78	
Marital Status	Single	10	8	3	3	6	5	3.24 ^{NS}
	Married	110	92	117	98	114	95	
Age (in Years)	20 to 30	10	8	12	10	15	12.50	4.20 ^{NS}
	31 to 40	55	46	52	43	48	40	
	More than 40	55	46	56	47	57	48	
Education	TCH	112	93	118	98	120	100	2.14 ^{NS}
	D.Ed	10	8	1	1	0	0	
	B.Ed	3	3	1	1	0	0	
	Graduate	8	7	8	7	7	6	
	MA	3	3	0	0	0	0	
	One year	2	2	1	1	2	2	
Years of Teaching	2 to 3 Years	7	6	4	3	3	3	1.47 ^{NS}
	4 to 5 Years	4	3	5	4	6	5	
	6 years & Above	107	89	110	92	109	91	
Type of Family	Nuclear	102	85	104	87	104	87	4.89 ^{NS}
	Joint	18	15	16	13	16	13	
Religion	Hindu	87	73	105	88	107	89	4.40 ^{NS}
	Non Hindu	33	28	15	13	13	11	
Income (Rs/Month)	Less Than 10000	11	9	13	11	12	10	3.48 ^{NS}
	10,001 to 15,000	72	60	67	56	57	48	
	15,001 to 20,000	26	22	29	24	36	30	
	More than 20,001	11	9	11	9	15	13	

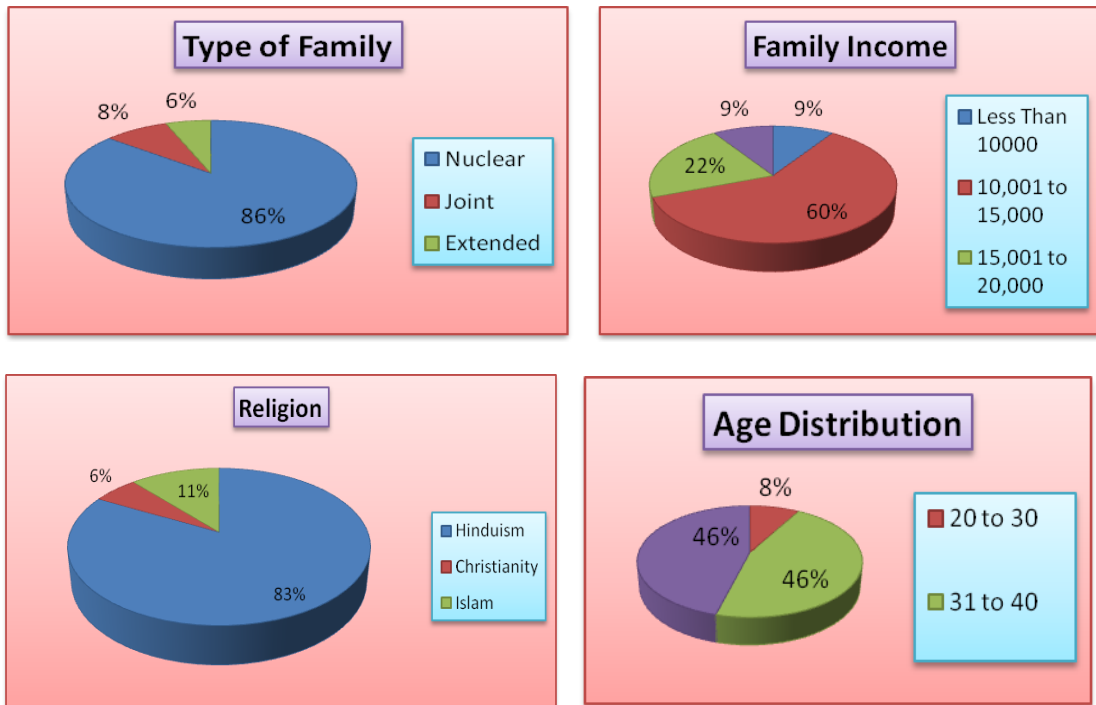
Analysis of subjects' socio demographic characteristics reveals that all three groups, Group I, Group II and Control Group were matched and comparable with each other. The statistical computations carried out revealed that there was no significant

difference between the characteristics of three groups as they were drawn from the same population and it implies that there is not much deviation from subjects in Group 1, Group 2 and control with respect to demographic variable and corresponding parameters within the demographic variable.



Graph 1: Distribution of the samples related to gender and marital status

The above diagrammatic representation shows the distribution of samples related to gender and marital status. Here we come to know that the female teachers with married status are more active in delivering the skills and knowledge aspects related to the mental health of the students.



Graph 2: Distribution of samples related to the demographic segments like type of family, family income, religion and age distribution

The diagrammatic representation shows that the distribution of samples related to the demographic segments like type of family, family income, religion and age distribution. It is inferred that the teachers with nuclear family status are more in majority and also the teachers with family income Rs.10,001 to 15,000 are the teachers who belong to Hindu religion, finally the teachers with the age group 31 to 40 and above 40 were more in number.

Table 2: Comparison of Knowledge scores of Pretest, Post-test I & Post-test II and F value of between Group I, Group II & Control Group

N=360

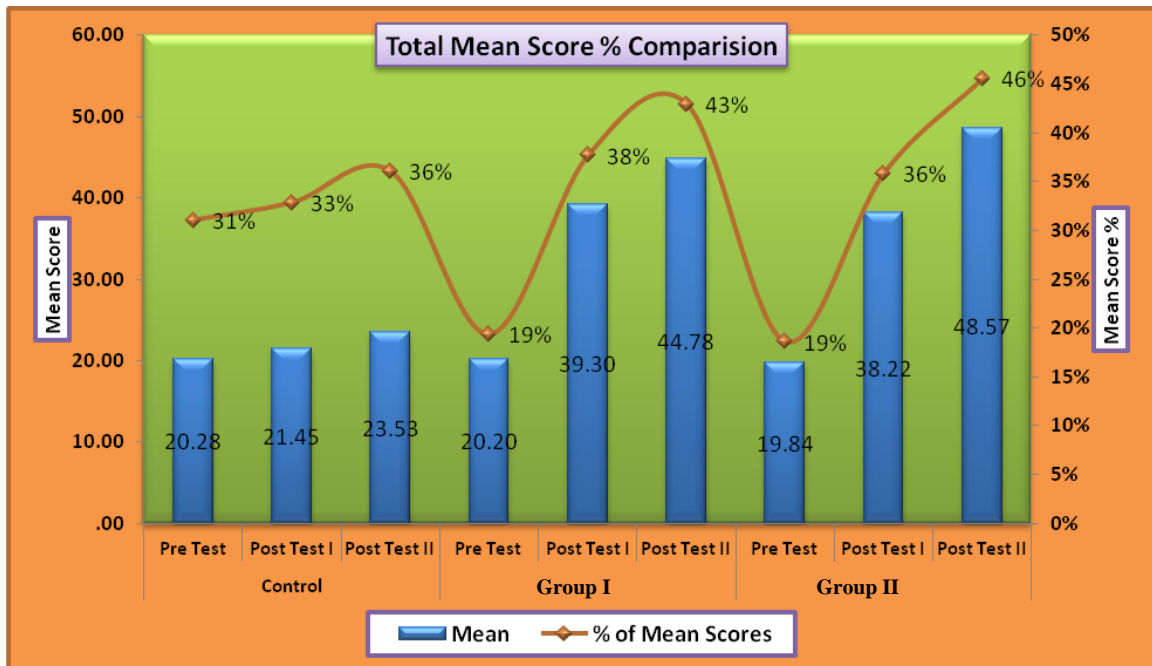
Test	Group	Mean	SD	Mini. Score	Maxi. Score	F	Sig.
Pre-test Knowledge	Group I	20.2	1.7	18	24	2.26	0.11 ^{NS}
	Group II	19.84	1.51	18	23		
	Control	20.23	1.81	17	25		
	Total	20.1	1.69	17	25		
Post-test Knowledge I	Group I	39.3	2.26	34	47	2203.37	0.00 ^{**}
	Group II	38.21	2.26	33	43		
	Control	21.45	1.9	17	27		
	Total	32.98	8.5	17	47		
Post-test Knowledge II	Group I	44.78	2.73	41	53	4378.27	0.00 ^{**}
	Group II	48.56	2.44	45	54		
	Control	23.53	1.24	22	26		
	Total	38.96	11.25	22	54		

*. Significant at the 0.05 level.

** . Significant at the 0.01 level.

^{NS}. Non Significant.

Table 2 reveals that the pre-test knowledge scores of all three groups when subjected to ANOVA, was found to be non-significant ($F=2.26$; $p>0.105$). However the post-test I and post-test II knowledge scores were found statistically significant. This indicates that there is significant difference in the Structured Educational Modules I and II with respect to both post-test 1 and 2 and showing Group 1 and 2 are dominating by measure of means and significantly differs (by F value).



Graph 3: Comparison of means with the corresponding training experiments (Control, Group 1, Group 2)

Graph 3 indicates that there is comparison of means with the corresponding training experiments (control, Group 1, Group 2), which indicates that there is increasing trend in the post test 1 and post test 2 with respect to both expt1 and expt2 compared to control module. This indicates that there is a significant influence on teachers with respect to both Group I and Group II by post-test 1 and 2.

Table 3 : Dimension wise comparison of pre-test knowledge scores and F value of Group I, Group II & Control Group considering all 6 Dimensions

N=360

Dimension	Group	No of items	Mean % score	SD	Std. Error	F value	Sig.
Emotional disorders	Group I	10	34.33	9.05	0.083	16.09	0.00**
	Group II	10	32.25	13.25	0.121		
	Control	10	40.42	12.05	0.11		
	Total	30	35.67	12.06	0.064		
Conduct disorders	Group I	10	31.5	9.41	0.086	0.78	0.46 ^{NS}
	Group II	10	31.25	11.42	0.104		
	Control	10	29.75	14.05	0.128		
	Total	30	30.83	11.77	0.062		
Hyperkinetic disorders	Group I	10	33.25	9.18	0.084	1.47	0.23 ^{NS}
	Group II	10	32.83	11.82	0.108		
	Control	10	31.08	9.94	0.091		
	Total	30	32.39	10.39	0.055		
Development disorders	Group I	10	33.08	11.14	0.102	9.6	0.0087**
	Group II	10	32.08	11.14	0.102		
	Control	10	38.25	12.75	0.116		
	Total	30	34.47	11.98	0.063		
Eating disorders	Group I	10	35.58	8.77	0.08	7.67	0.004**
	Group II	10	34.67	11.66	0.106		
	Control	10	30.75	9.8	0.089		
	Total	30	33.67	10.34	0.054		
Habit disorders	Group I	10	34.25	10.43	0.095	2.39	0.04*
	Group II	10	35.33	10.92	0.1		
	Control	10	32.5	8.91	0.081		
	Total	30	34.03	10.16	0.054		

*. The mean difference is significant at the 0.05 level.

** . The mean difference is significant at the 0.01 level.

^{NS}. Non Significant.

The above table depicts the pre-test mean score of mental health disorders were compared between the groups to know whether they were statistically significant or not.

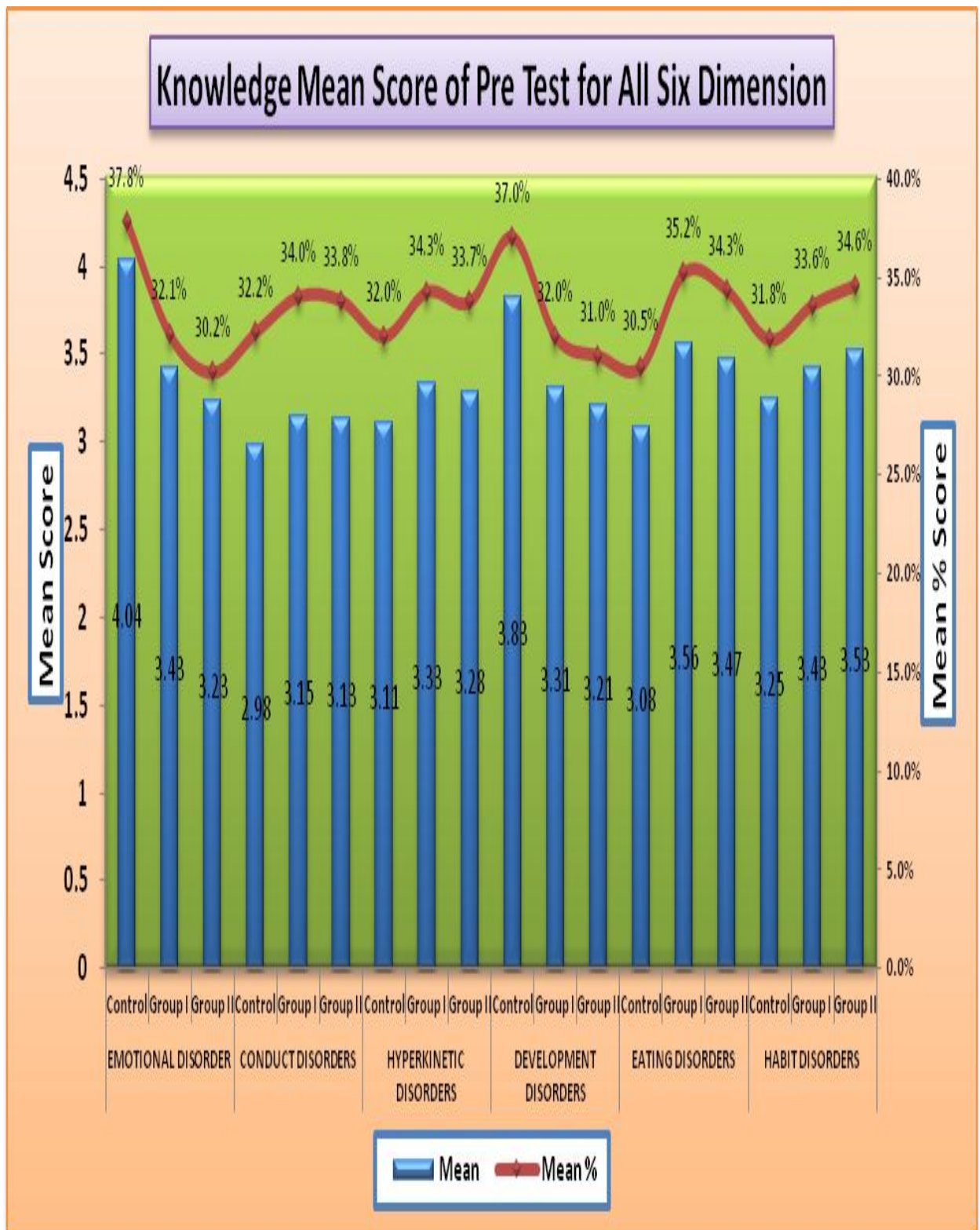
The results showed there is statistical difference in emotional disorder, developmental disorder, eating disorder, habit disorder respectively with respect to mean score level.

However conduct disorder and hyperkinetic disorders mean score levels showed non-significance.

Table 3 reveals the results of Post HOC ANOVA test, which was carried out when F test had shown significant results. The purpose of doing post HOC ANOVA is to do multiple comparisons of each group across dimensions.

This test indicates that there is higher fluctuation of all the means of the disorder around the grand mean. This tells us there is more deviation and high difference among the groups with respect to these disorders.

The figure indicates that there is comparison of means with the corresponding mental health disorders like emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders and the result indicates that there is an increasing trend in the control group compared to groups 1 and 2 with respect to both emotional and developmental disorder and there is increasing trend with respect to group 1 and 2 in eating and habit disorders. Before conducting any test these disorders were significantly affecting the groups. So, while formulating the decision about the mental health of the children's, there is a need to concentrate on these variables rather than others.



Graph 4: Dimension wise mean and mean percentage comparison of pre-test knowledge scores and F value of Group I, Group II & Control Group

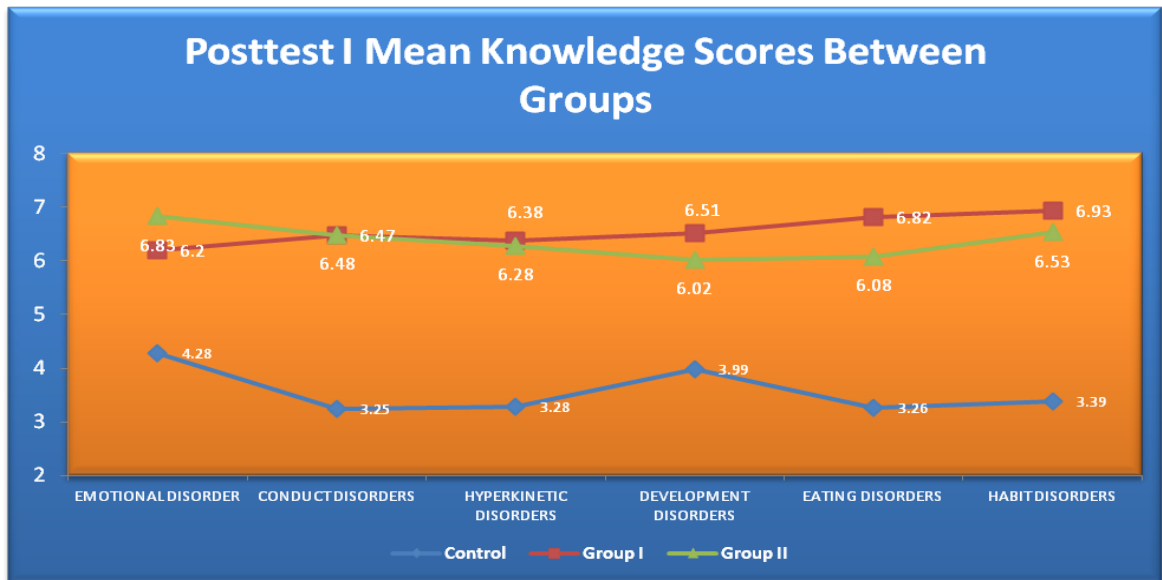
Table 4: Dimension wise comparison of post-test I knowledge scores and F value of Group I, Group II & Control Group.

N=360

Dimension	Group	No of items	Mean % score	SD	Std. Error	F Value	Sig.
Emotional disorder	Group I	10	62	14.41	0.132	123.91	.000**
	Group II	10	68.33	12.46	0.114		
	Control	10	42.75	12.36	0.113		
	Total	30	57.69	17.02	0.09		
Conduct disorders	Group I	10	64.67	11.88	0.108	247.6	.000**
	Group II	10	64.75	13.03	0.119		
	Control	10	32.5	13.86	0.126		
	Total	30	53.97	19.95	0.105		
Hyperkinetic disorders	Group I	10	63.75	12.17	0.111	242.87	.000**
	Group II	10	62.75	13.9	0.127		
	Control	10	32.83	10.78	0.098		
	Total	30	53.11	18.92	0.1		
Development disorders	Group I	10	65.08	13.6	0.124	130.31	.000**
	Group II	10	60.17	12.3	0.112		
	Control	10	39.92	12.47	0.114		
	Total	30	55.06	16.79	0.088		
Eating disorders	Group I	10	68.17	12.16	0.111	293	.000**
	Group II	10	60.83	13.94	0.127		
	Control	10	32.58	9.57	0.087		
	Total	30	53.86	19.49	0.103		
Habit disorders	Group I	10	69.33	10.67	0.097	369.73	.000**
	Group II	10	65.33	13.09	0.119		
	Control	10	33.92	9.01	0.082		
	Total	30	56.19	19.31	0.102		

** . The mean difference is significant at the 0.01 level.

The above table: 4 depicts the post-test I mean score of mental health disorders were compared between the groups to know whether they were statistically significant or not. The results showed there is statistical significance in all the domains studied.



Graph 5: Comparison of mean post-test I knowledge scores between groups.

The above graph 5 depicts the post-test I mean score of mental health disorders that were compared between the groups to know whether they were statistically significant or not.

The results showed there is a statistical difference in emotional disorder, Conduct disorder, Hyperkinetic disorder, Developmental disorder, Eating disorder and Habit disorder respectively with respect to mean score levels.

The above tabulated post test 1 scores information gives that there is a significant impact of all mental health disorders like emotional disorder, Conduct disorder, Hyperkinetic disorder, Developmental disorder, Eating disorder, Habit disorder (by mean scores) on group 1 and 2 effectively when compared to the control group. So while formulating the decision about the mental health of the children's we need to concentrate on these variables rather than others.

Graph 5 indicates that there is comparison of means with the corresponding mental health disorders like emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders, the result indicates

that there is increasing trend in the groups 1 and 2 with respect to all disorders compared to control group.

Table 5: Dimension wise comparison of post-test 2 knowledge scores and F value of Group I, Group II & Control Group

N=120

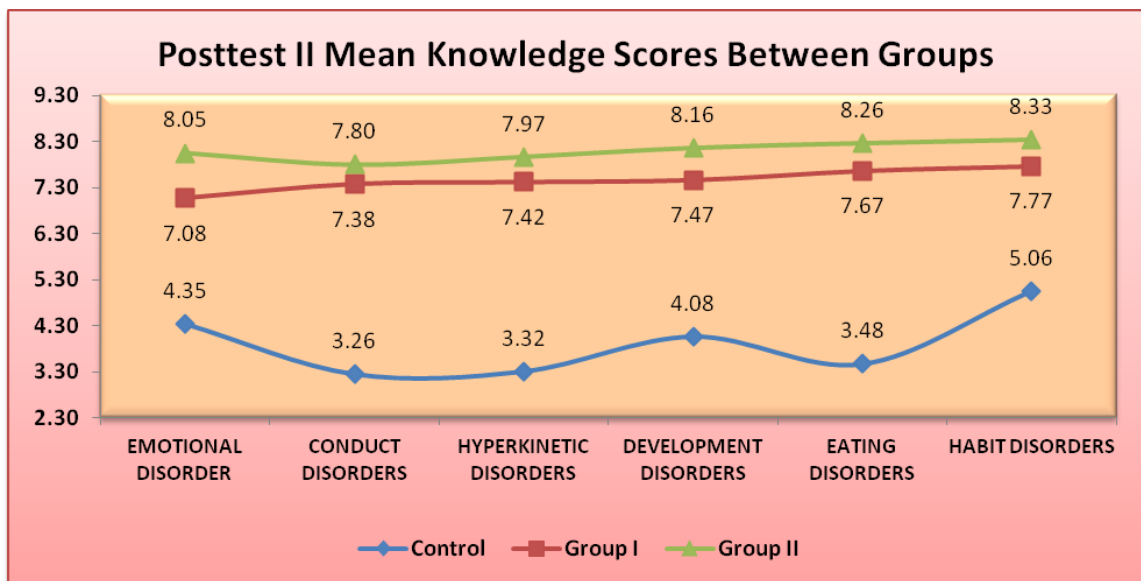
Dimension	Group	No of items	Mean % Scores	SD	Std. Error	F value	Sig.
Emotional disorder	Group I	10	70.75	15.4	0.141	197.6	.000**
	Group II	10	80.5	15.82	0.144		
	Control	10	43.5	13.51	0.123		
	Total	30	64.92	21.63	0.114		
Conduct disorders	Group I	10	73.83	12.65	0.115	339.8	.000**
	Group II	10	78	17.9	0.163		
	Control	10	32.58	13.69	0.125		
	Total	30	61.47	25.35	0.134		
Hyperkinetic disorders	Group I	10	74.25	11.35	0.104	474.9	.000**
	Group II	10	79.67	15.5	0.141		
	Control	10	33.17	10.99	0.1		
	Total	30	62.36	24.39	0.129		
Development disorders	Group I	10	74.67	12.9	0.118	309.9	.000**
	Group II	10	81.58	14.2	0.13		
	Control	10	40.75	13.67	0.125		
	Total	30	65.67	22.43	0.118		
Eating disorders	Group I	10	76.67	13.43	0.123	403.7	.000**
	Group II	10	82.58	17.17	0.157		
	Control	10	34.75	11.45	0.104		
	Total	30	64.67	25.61	0.135		
Habit disorders	Group I	10	77.67	12.42	0.113	126.3	.000**
	Group II	10	83.33	16.62	0.152		
	Control	10	50.58	21.04	0.192		
	Total	30	70.53	22.23	0.117		

**. The mean difference is significant at the 0.01 level.

Table 5 reveals the results of Post HOC ANOVA test, which was carried out when F test had shown significant. The purpose of doing post HOC ANOVA is to do multiple comparisons of each group across dimensions.

There is a higher variation among the group (1 & 2) means with respect to different disorders (emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders), which indicates there is significant difference among the groups in knowledge gain. While explaining any groups performance after the test we should take the standard error as a major account for explaining the variation in the scores. The groups corresponding to the different disorders having lesser standard error will give the more accurate result compared to the group having higher standard error.

Graph 6 indicates that there is comparison of means with the corresponding mental health disorders like emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders. The result indicates that there is increasing trend in the groups 1 and 2 with respect to all disorders compared to control group.



Graph 6: Comparison of mean post-test II knowledge scores between groups.

Table 6: Comparison of Pre-test, Post-test I and Post-test II knowledge Scores within groups including enhancement I and enhancement II.

N=360

Groups	Pre Test Mean (SD)	Post Test 1 Mean (SD)	Post Test II Mean (SD)	Enhancement I	Enhancement II	Post Test I		Post Test II		Post Test I & II	
						Paired t Test	Sig.	Paired t test	Sig.	Paired t Test	Sig.
Group I	33.67 (2.85)	65.50 (4.61)	74.64 (4.55)	49%	55%	68.85**	0.00	77.06**	0.00	4.21 ^{NS}	0.12
Group II	33.07 (2.52)	63.69 (3.77)	80.94 (4.07)	48%	59%	77.91**	0.00	107.48**	0.00	9.47*	0.05
Control	33.79 (3.03)	35.75 (3.17)	39.22 (2.07)	5%	14%	3.21 ^{NS}	0.54	4.14 ^{NS}	0.47	5.21 ^{NS}	0.09
(df=119; p<0.05* ; p<0.01**)						(Standard Deviation in parenthesis.)					

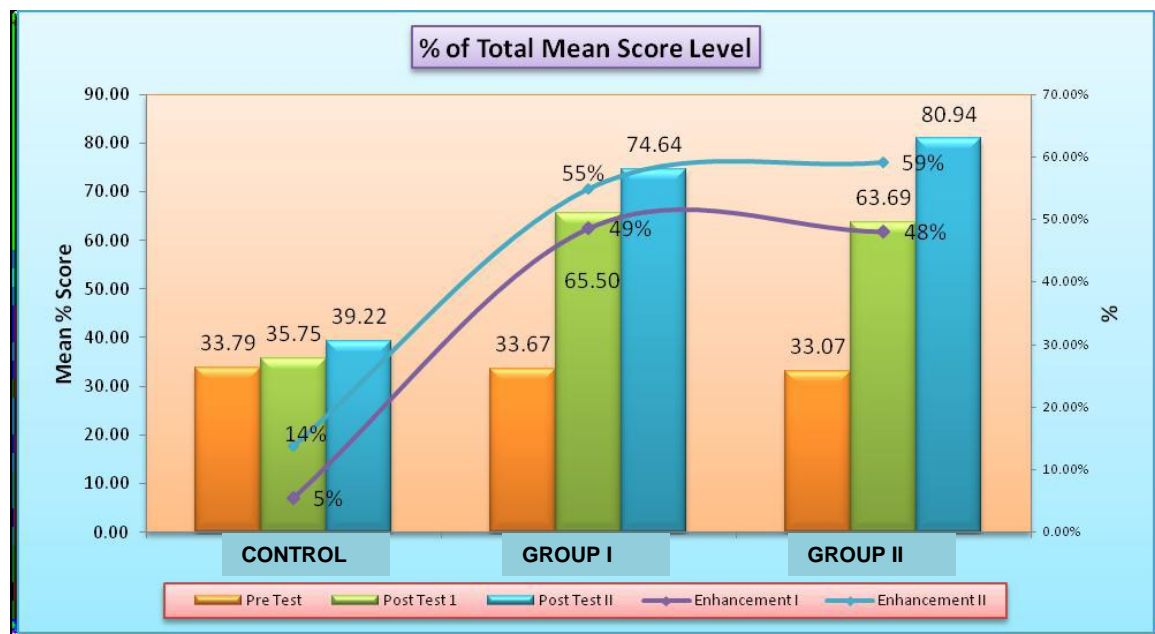
The data presented in table 6 show Group I post-test I and post-test II knowledge scores were statistically significant. Null hypothesis HO_1 is rejected and the research hypothesis H_1 is accepted. This indicates that the Structured Teaching on identification of common mental health problems for primary school teachers was an effective method for increasing the knowledge of primary school teachers on common mental health problems.

Group II post-test I and post-test II of knowledge scores were statistically significant. The null hypothesis HO_2 is rejected and the research hypothesis H_2 is accepted. This indicates that the Self Instructional Module on identification of common mental health problems for primary school teachers was an effective method for

increasing the knowledge of primary school teachers on common mental health problems.

The control group post-test I and post-test II for knowledge score was statistically non significant. The research hypothesis H_3 is rejected and the null hypothesis HO_3 is accepted. This indicates that there is no significant difference in the mean pre and post test knowledge scores of the control group not exposed to routine intervention.

Both the educational modules I administered for Group I and educational modules II administered for Group II were effective in increasing the knowledge of primary school teachers with regards to common mental health problems. The research hypothesis H_4 has been accepted and the null hypothesis HO_4 is rejected.



Graph 7: Comparison of percentage of total mean score level.

The above graph 7 shows the t test value and paired t test value for different method of tests. The different format of tests with respect to control groups shows the non significant t statistic as well as paired t statistic, which says that there is no significant difference among these techniques with respect to control group.

There is a significant t statistic for Group 1 and 2, which depicts that there is significant difference among the different techniques of testing with respect to delivering the messages by the Group 1 and 2 methods.

There is significant paired t statistic with respect to Group 2, this shows that there is an impact on Group 2 groups after the post-test 1 and 2, which shows that there is significant difference before and after the post-test 1 and 2. The paired t test having non-significant difference in Group 1, which says that there is no difference in delivery modules.

Graph 7 indicates that there is comparison of % mean scores with the corresponding testing techniques like control, expt1 and 2, this shows that there is an increasing trend line across the above testing techniques. Among these the Group 2 has higher mean % rather than other techniques.

Table 7: Dimension wise Paired 't' value of pre-test, post-test 1 and post-test 2 of Group I, Group II and control group knowledge scores on selected mental health problems

N=360

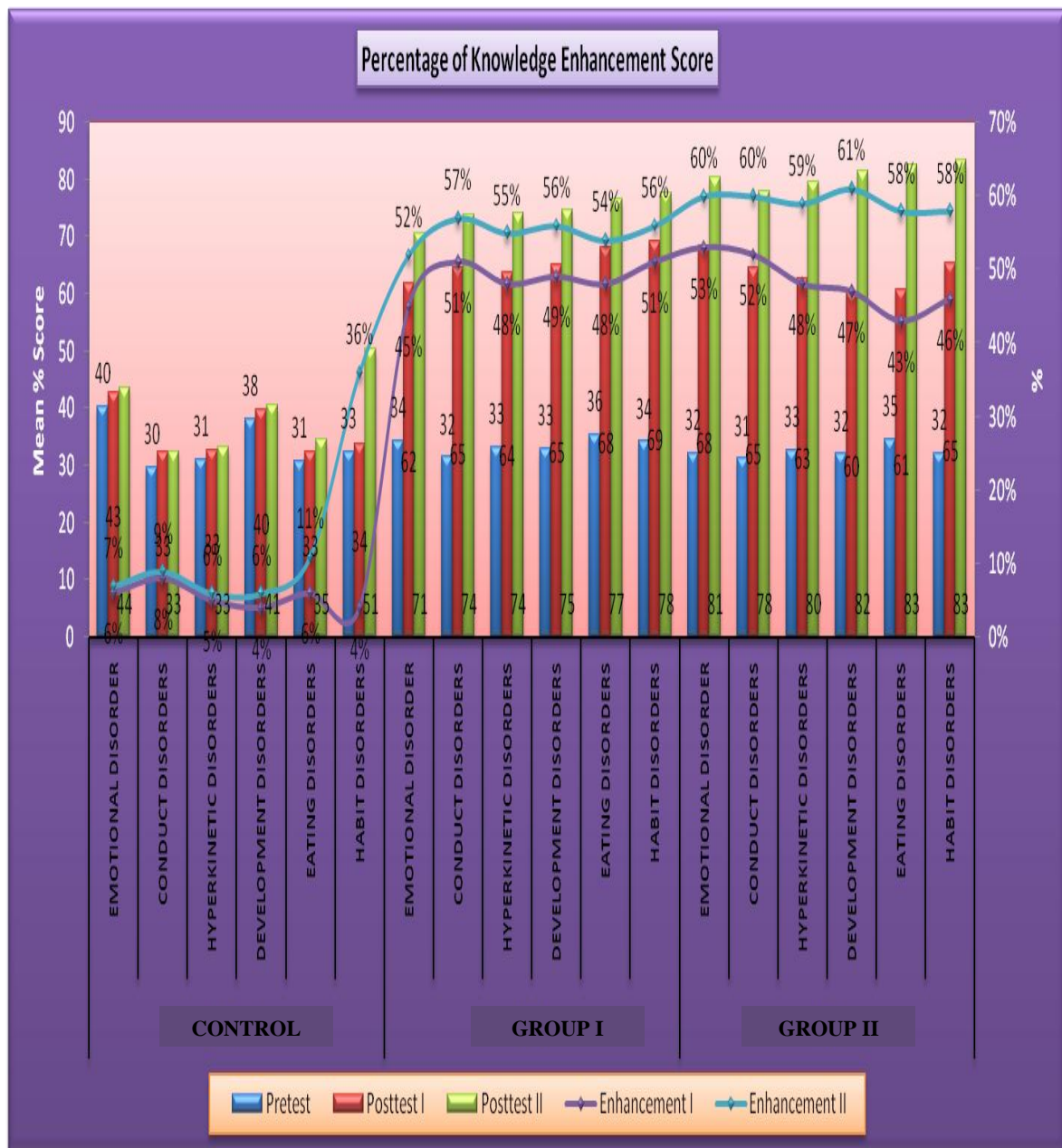
Group	Dimension	Pre Test	Post Test I	Post Test II	Post Test I		Post Test II	
					Paired t Test	Sig.	Paired t Test	Sig.
Group I	Emotional disorder	34.33	62	70.75	21.37	0.00**	24.41	0.02*
	Conduct disorders	31.5	64.67	73.83	27.75	0.00**	30.70	0.00**
	Hyperkinetic disorders	33.25	63.75	74.25	27.04	0.00**	33.28	0.00**
	Development disorders	33.08	65.08	74.67	26.83	0.00**	31.55	0.00**
	Eating disorders	35.58	68.17	76.67	28.78	0.00**	32.98	0.00**
	Habit disorders	34.25	69.33	77.67	31.08	0.00**	31.06	0.00**
Group II	Emotional disorder	32.25	68.33	80.5	27.35	0.00**	26.73	0.00**
	Conduct disorders	31.25	64.75	78	25.67	0.00**	27.51	0.00**
	Hyperkinetic disorders	32.83	62.75	79.67	23.32	0.00**	26.38	0.00**
	Development disorders	32.08	60.17	81.58	24.44	0.00**	33.08	0.00**
	Eating disorders	34.67	60.83	82.58	21.77	0.00**	26.36	0.00**
	Habit disorders	32.25	65.33	83.33	24.62	0.00**	28.49	0.00**
Control	Emotional disorder	40.42	42.75	43.5	4.97	0.45 ^{NS}	4.48	0.32 ^{NS}
	Conduct disorders	29.75	32.5	32.58	4.96	0.21 ^{NS}	5.08	0.78 ^{NS}
	Hyperkinetic disorders	31.08	32.83	33.17	4.76	0.90 ^{NS}	4.72	0.19 ^{NS}
	Development disorders	38.25	39.92	40.75	3.86	0.18 ^{NS}	4.12	1.21 ^{NS}
	Eating disorders	30.75	32.58	34.75	4.00	0.09 ^{NS}	5.68	2.10 ^{NS}
	Habit disorders	32.5	33.92	50.58	3.28	1.23 ^{NS}	10.27	2.10 ^{NS}

*. The mean difference is significant at the 0.05 level.

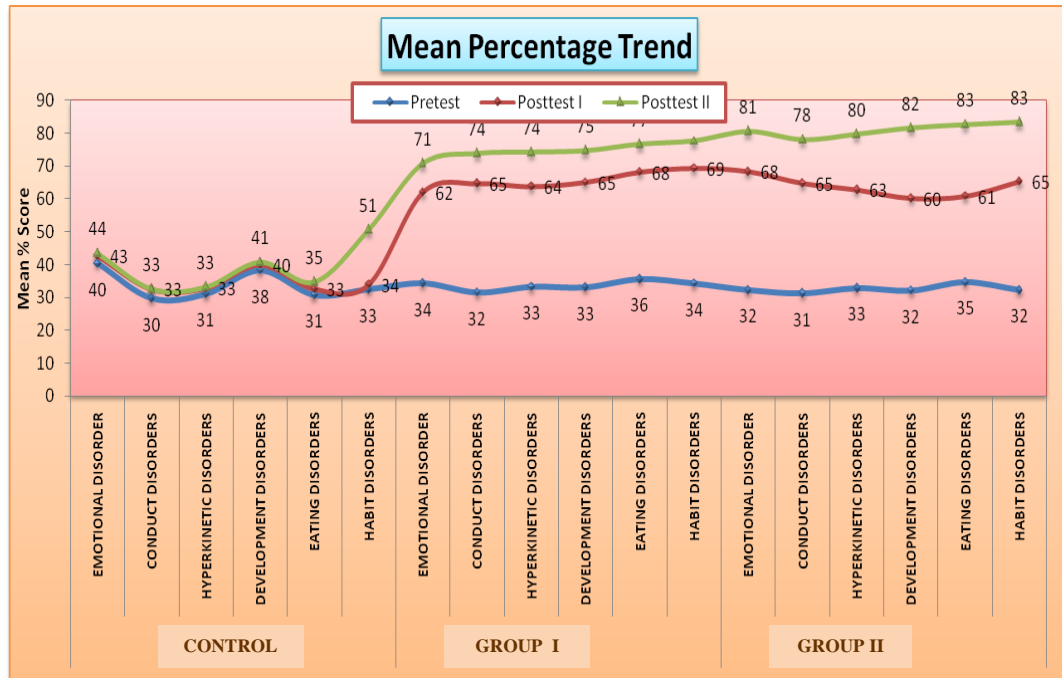
**. The mean difference is significant at the 0.01 level.

^{NS}. Non Significant.

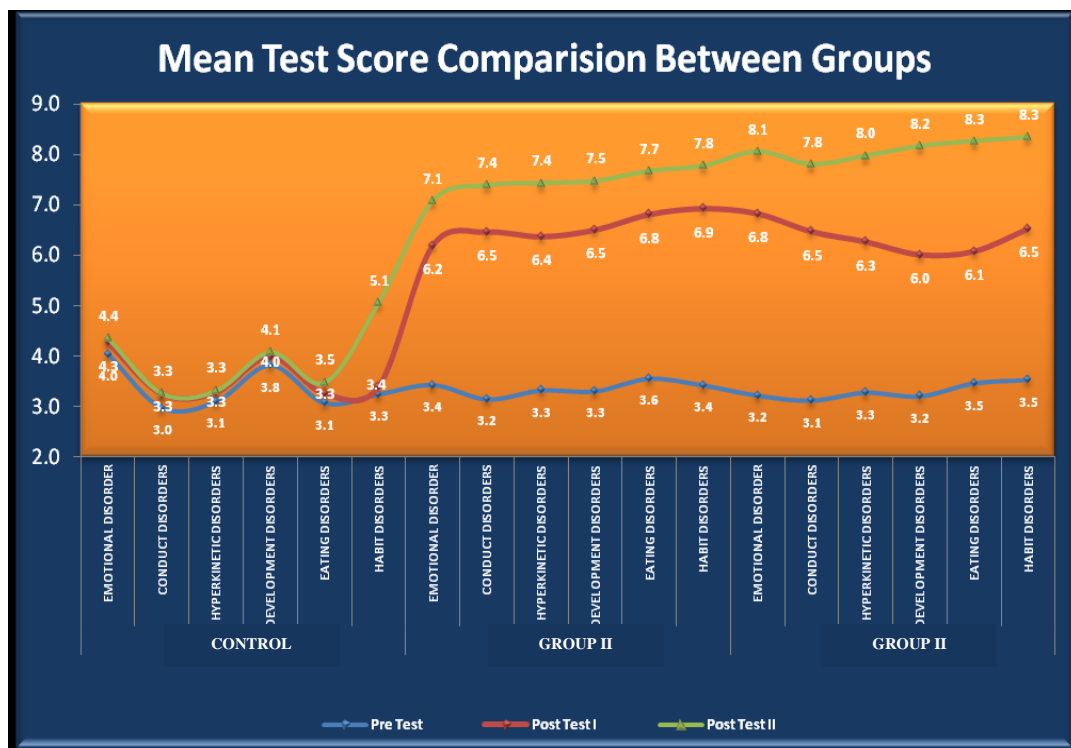
Table 7 demonstrates the t value of pre-test, post-test I & II among all the dimensions across groups. It was seen that all the mean differences of six dimensions were significant for Group I and Group II.



Graph 8: Domain wise comparison of percentage of total means score level



Graph 9: Domain wise comparison of mean percentage trend

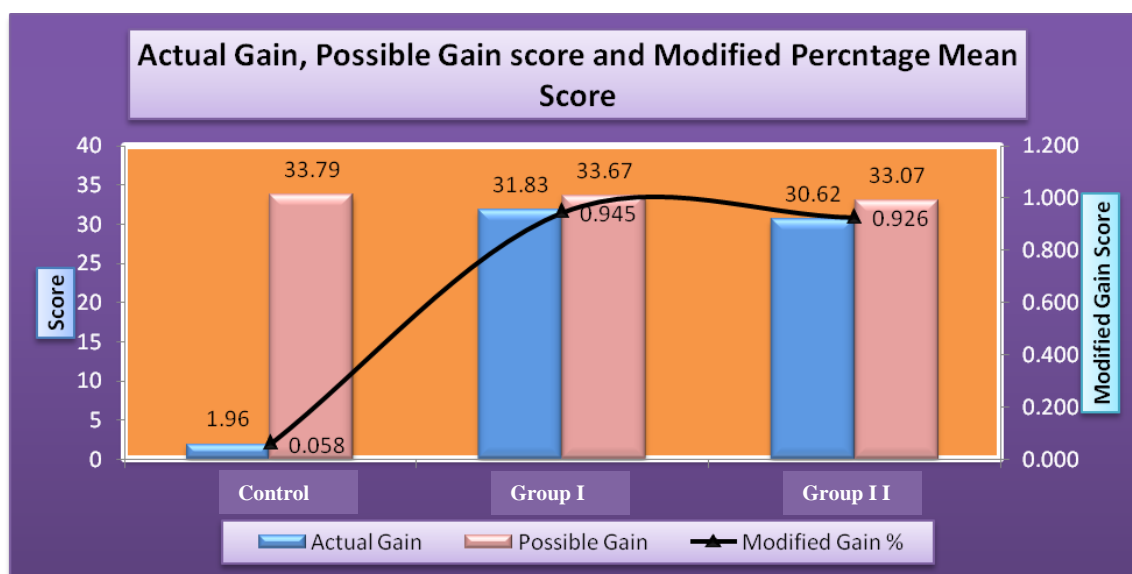


Graph 10: Domain wise comparison of mean test score between groups

Table 8: Group wise total Mean score and Percentage of Actual gain, possible gain and Modified gain

N=360

Groups	Pre Test	Post Test 1	Post Test II	Actual Gain	Possible Gain	Modified Gain
Control	33.79	35.75	39.22	1.96	33.79	6%
EXPT I	33.67	65.5	74.64	31.83	33.67	95%
EXPT II	33.07	63.69	80.94	30.62	33.07	93%

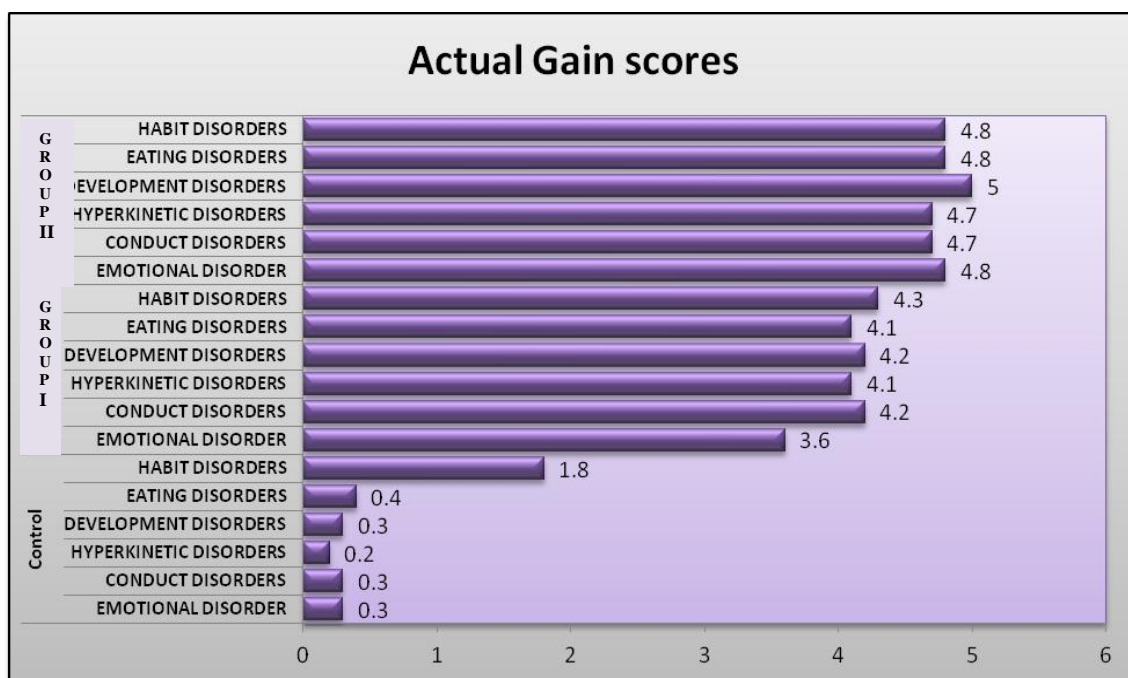


Graph 11: Actual gain, possible gain score and modified percentage mean score

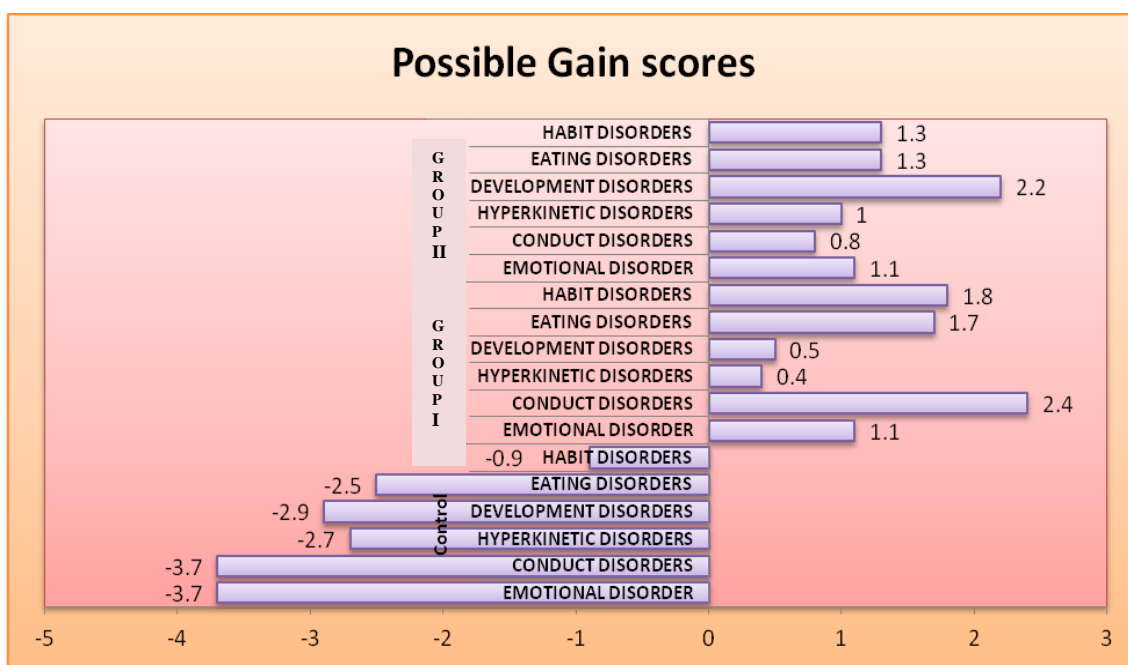
Table 9: Dimension wise Mean percentage scores, actual and modified gain scores of the subjects on selected mental health problems

N=360

Group	Disorders	Pre Test mean	Post Test I mean	Post Test II mean	Actual Gain scores	Possible Gain scores	Modified Gain % scores
Control	Emotional disorder	40.42	42.75	43.5	2.33	40.42	6%
	Conduct disorders	29.75	32.5	32.58	2.75	29.75	9%
	Hyperkinetic disorders	31.08	32.83	33.17	1.75	31.08	6%
	Development disorders	38.25	39.92	40.75	1.67	38.25	4%
	Eating disorders	30.75	32.58	34.75	1.83	30.75	6%
	Habit disorders	32.5	33.92	50.58	1.42	32.5	4%
Group I	Emotional disorder	34.33	62	70.75	27.67	34.33	81%
	Conduct disorders	31.5	64.67	73.83	33.17	31.5	100%
	Hyperkinetic disorders	33.25	63.75	74.25	30.5	33.25	92%
	Development disorders	33.08	65.08	74.67	32	33.08	97%
	Eating disorders	35.58	68.17	76.67	32.59	35.58	92%
	Habit disorders	34.25	69.33	77.67	35.08	34.25	100%
Group II	Emotional disorder	32.25	68.33	80.5	36.08	32.25	100%
	Conduct disorders	31.25	64.75	78	33.5	31.25	100%
	Hyperkinetic disorders	32.83	62.75	79.67	29.92	32.83	91%
	Development disorders	32.08	60.17	81.58	28.09	32.08	88%
	Eating disorders	34.67	60.83	82.58	26.16	34.67	75%
	Habit disorders	32.25	65.33	83.33	33.08	32.25	100%



Graph 12: Domain wise comparison of actual gain scores between groups



Graph 13: Domain wise comparison of possible gain scores between groups

Table 10: Functional relationship between post-test I knowledge score and demographical variable

N=360

Independent Variable	Group I		Group II		Control	
	Beta Coefficient	t Value (Sig.)	Beta Coefficient	t Value (Sig.)	Beta Coefficient	t Value (Sig.)
Age	0.03 ^{NS} (0.02)	1.632 (0.83)	0.11 ^{NS} (0.1)	1.14 (0.12)	0.43* (0.12)	3.61 (0.04)
Marital duration	0.13** (0.14)	6.645 (0.012)	0.20** (0.04)	5.207 (0.01)	0.11 ^{NS} (0.4)	0.289 (0.43)
Years of Teaching	0.38** (0.03)	12.745 (0)	0.60* (0.21)	2.859 (0.03)	0.07 ^{NS} (0.03)	2.42 (0.92)
Income	0.09 ^{NS} (1)	0.091 (0.67)	0.0009 ^{NS} (0.14)	0.007 (0.43)	0.01 ^{NS} (1.02)	0.001 (0.21)

** . The mean difference is significant at the 0.01 level.

^{NS} . Non-Significant.

Research analysis is done to know the effectiveness of knowledge scores on all demographic variables. In Table 11 some of the variables are non-significant and were excluded from the regression model. It was found that years of teaching is the most contributing demographic variable on knowledge scores followed by marital duration.

Table 11: Association between post-test I knowledge score and demographical variable gender of the subjects

N=360

Group	Gender	Less Than Median	More Than Median	Total	Median	Chi-Square
		<	>			
GROUP I	Female	45	33	78	65.00	0.84 ^{NS}
	Male	25	17	42	65.00	
	Total	70	50	120		
GROUP II	Female	55	33	88	63.34	0.108 ^{NS}
	Male	25	7	32	63.54	
	Total	80	40	120		
Control	Female	55	38	93	35.00	0.48 ^{NS}
	Male	18	9	27	36.67	
	Total	73	47	120		

The data presented in the above table 11 indicates that there is no significant relationship between gain in knowledge and gender.

Table 12: Association between post-test I knowledge score and demographical variable marital status

N=360

Group	Marital Status	Less Than Median	More Than Median	Median	Total	Chi-Square
		<	>			
Group I	Single	6	4	65	10	0.91 ^{NS}
	Married	64	46	65.12	110	
	Total	70	50		120	
Group II	Single	2	1	65.83	3	1.00 ^{NS}
	Married	78	39	63.34	117	
	Total	80	40		120	
Control	Single	4	2	35	6	0.764 ^{NS}
	Married	69	45	36.67	114	
	Total	73	47		120	

The data presented in the above table 12 indicate that there is no significant relationship between gain in knowledge and marital status.

Table 13: Association between post-test I Knowledge Score and Demographical variable age

						N=360
Group	Age Duration	Less Than Median	More Than Median	Total	Median	Chi-Square
		<	>			
Group I	20 to 30	6	7	13	65.01	0.67 ^{NS}
	30 to 40	33	21	54	65.00	
	More Than 40	31	22	53	65.21	
	Total	70	50	120		
Group II	20 to 30	4	1	5	63.34	0.71 ^{NS}
	30 to 40	28	13	41	63.00	
	More Than 40	48	26	74	64.21	
	Total	80	40	120		
Control	20 to 30	8	6	14	35.00	0.95 ^{NS}
	30 to 40	34	21	55	35.12	
	More Than 40	31	20	51	36.66	
	Total	73	47	120		

The data presented in the above table 13 indicates that there is no significant relationship between gain in knowledge and age.

Table 14: Correlation between knowledge and skills scores.**N=360**

Scores	Correlation	Emotional Score	Behavioral Score	Knowledge Scores
Emotional Score	Pearson Correlation	1	.223**	-.020 ^{NS}
	Sig. (2-tailed)		.006	.812
Behavioral Score	Pearson Correlation	.223**	1	.102
	Sig. (2-tailed)	.006		.212
Knowledge Scores	Pearson Correlation	-.020	.102	1
	Sig. (2-tailed)	.812	.212	

** . The mean difference is significant at the 0.01 level.

The above table 14 was computed to know the co-rrrelation between knowledge scores and skill scores. The results showed that Emotional and behavior skills are positively correlated and statistically significant. However, emotional scores and knowledge scores were negatively correlated with each other and statistically not significant.

ANALYSIS OF SKILL OF SUBJECTS IN IDENTIFICATION OF COMMON MENTAL ILLNESS AMONG PRIMARY SCHOOL CHILDREN

Table 15: Distribution of Subjects according to their Personal Characteristics in Group I, Group II and Control Group

Personal Characteristics	Parameter	Group I		Group II		CONTROL		N=75
		Freq	% age	Freq	% age	Freq	%age	Chi square between groups
Gender	Male	9	36	10	40	8	32	4.87 ^{NS}
	Female	16	64	15	60	17	68	
Age Group	Less than 30	6	24	5	20	6	24	12.47*
	30 to 40	12	48	16	64	10	40	
	more than 40	7	28	4	16	9	36	
Marital status	Single	5	20	3	12	5	20	1.87 ^{NS}
	Married	20	80	22	88	20	80	
	One Year	3	12	1	4	1	4	
Years of teaching	2-3Years	2	8	9	36	5	20	2.7 ^{NS}
	4-5 years	12	48	5	20	7	28	
	6 Years & above	8	32	10	40	12	48	
Type of family	Nuclear	21	84	19	76	20	80	1.8 ^{NS}
	Joint	4	16	6	24	5	20	
Education	TCH	20	80	19	76	21	84	2.68 ^{NS}
	D.Ed	1	4	1	4	1	4	
	B.Ed	2	8	1	4	2	8	
	Graduate	2	8	4	16	1	4	
	MA	0	0	0	0	0	0	
Income (Rs/Month)	Less Than 10000	5	20	4	16	8	32	3.57 ^{NS}
	10,001 to 15,000	10	40	12	48	9	36	
	15,001 to 20,000	4	16	5	20	6	24	
	More than 20,001	6	24	4	16	2	8	

(** Significant at <0.01 level; * Significant at <0.05 level; NS= Non Significant)

In order to find out the skill scores of the subjects on identification of common mental health problems, 20% of the samples were drawn by lottery method from each study group and skill was assessed.

Analysis of the personal characteristics of the 75 subjects reveals that all 3 groups, Group I, Group II and Control Group were matched and comparable with each other. The statistical computations carried out revealed that there was no significant difference between the gender, marital status and years of teaching. However, age group characteristic alone was found to be significant.

Table 16: Frequency percentage distribution of Pre-test, Post-test I and Post-test II Skill Scores of Group I

Tests	Disorder	No. of Disorder Identified	%	Type of Disorder	n=25	
					Frequency	%
Pre Test	No	20	80			
	Yes	5	20	Emotional	3	60
				Behavioral	2	40
Post Test I	No	16	64			
	Yes	9	36	Emotional	4	44
				Behavioral	5	56
Post Test II	No	15	60			
	Yes	10		Emotional	4	40
			40	Behavioral	6	60

Rutter-B Scale consists of 26 statements concerning the child's behavior. The teacher scored one of three statements i.e., definitely applies, applies somewhat or does not apply for each item. A score of 2, 1 and 0 were assigned respectively and the total scores range of 0–52 by summation of the scores of the 26 items. A cut off score of 9 has discriminative value, any child scoring 9 or above is classified as a problem child. A "Emotional" sub score is obtained by adding the scores of items 7, 10, 17 and 23 (often worried, worries about many things; often appears miserable, unhappy, tearful or distressed; tends to be fearful or afraid of new things or new situations; has had tears on arrival at school or has refused to come into the building this year). A "Behavioral" sub score is obtained by adding the scores of items 4, 5, 15, 19, 20 and 26 (often destroys

own or others' belongings; fights moderately with other children; is often disobedient; often tells lies; has stolen things on one or more occasions; bullies other children). The selection of children with possible emotional or behavioral disorders by means of the scale is a two-stage procedure. First, children with a total score of 9 or more (boys or girls) are designated as showing some disorder. Second, some of these children, those with an emotional score exceeding the behavioral score are designated neurotic, and those with a conduct score exceeding the emotional score are designated having conduct disorder. Children with equal emotional and behavioral sub scores remain undifferentiated.

In the above table 16, depicts the frequency and percentage of emotional and behavioral disorders. The teachers were able to identify behavior problems in the children before and after undergoing the structured teaching on identification of common mental disorders.

Table 17: Frequency percentage distribution of Pretest, Post-test I, Post-test II Skill Scores of Group II

n=25						
Tests	Disorder	Frequency	% age	Type of Disorder	Frequency	% age
Pre Test	No	22	88	Emotional	2	67
	Yes	3	12	Behavioral	1	33
Post Test I	No	19	76	Emotional	4	67
	Yes	6	24	Behavioral	2	33
Post Test II	No	17	68	Emotional	6	75
	Yes	8	32	Behavioral	2	25

In the above table 17, depicts the frequency and percentage of emotional and behavioral disorders the teachers identified in the children before and after undergoing the self-instructional module on identification of common mental disorders.

Table 18: Frequency percentage distribution of Pre-test, Post-test I, Post-test II Skill Scores of Control Group

n=25						
Tests	Disorder	No. of Disorder Identified	%	Type of Disorder	Frequency	%
Pre-test	No	22	88	Emotional	0	00
	Yes	3	12	Behavioral	3	100
Post-test I	No	21	84	Emotional	1	25
	Yes	4	16	Behavioral	3	75
Post-test II	No	22	88	Emotional	1	25
	Yes	3	12	Behavioral	3	75

In the above table 18, depicts the frequency and percentage of emotional and behavioral disorders that the teachers identified in the children before and after without undergoing either of the educational modules.

Table 19: Mean, SD of Pre-test, Post-test I & Post-test II scores and Paired t-test Value of Skill Scores of Subjects

N=75										
Groups	Disorder Score	Pre Test	Post Test 1	Post Test II	Post Test I		Post Test II		Post Test I & II	
					Paired t Test	Sig.	Paired t Test	Sig.	Paired t Test	Sig.
GROUP I	Emotional Score	3.76	4.12	4.52	3.50*	0.03	3.87*	0.04	3.40*	0.06
	Behavioral score	7.24	7.36	8.76	2.45 ^{NS}	0.14	4.12**	0.00	4.21*	0.04
GROUP II	Emotional Score	3.92	4.62	4.72	3.85*	0.02	4.43**	0.00	1.32 ^{NS}	0.32
	Behavioral score	6.96	8.92	8.76	4.12**	0.001	5.12**	0.00	1.22 ^{NS}	0.65
Control	Emotional Score	3.5	3.65	4.12	1.21 ^{NS}	0.12	1.43 ^{NS}	0.87	1.20 ^{NS}	0.43
	Behavioral score	6.21	6.78	7.15	1.35 ^{NS}	0.87	1.95 ^{NS}	0.31	2.00 ^{NS}	0.21

(** Significant at <0.01 level; * Significant at <0.05 level; NS= Non Significant)

The data presented in table 19 show Group I post-test I and post-test II of emotional and behavioral scores were statistically significant. Null hypothesis H_{O1} has

been rejected and the research hypothesis H_1 is accepted. This indicates that the Structured Teaching on identification of common mental health problems for primary school teachers was an effective method for increasing the skill of primary school teachers on common mental health problems.

Group II post-test I and post-test II of emotional and behavioral scores were statistically significant. The null hypothesis HO_2 is rejected and the research hypothesis H_2 has been accepted. This indicates that the Self Instructional Module on identification of common mental health problems for primary school teachers was an effective method for increasing the skill of primary school teachers on common mental health problems.

The control group post-test I and post-test II for emotional and behavioral Score was statistically non significant. The research hypothesis H_3 is rejected and the null hypothesis HO_3 has been accepted. This indicates that there is no significant difference in the mean pre and post-test skill scores of the control group not exposed to routine intervention.

Both the educational modules I administered for Group I and educational modules II administered for Group II were effective in increasing the skill of primary school teachers with regard to common mental health problems. The research hypothesis H_4 has been accepted and the null hypothesis HO_4 has been rejected.

Table 20: Correlation analysis between Years of Teaching, gender, Emotional and Antisocial score

N=75					
Group	Variables	Marital duration	Years of Teaching	Emotional Score	Behavioral score
Group I	Marital duration	1			
	Years of Teaching	.887**	1		
	Emotional Score	.122	.884**	1	
	Behavioral score	-.022	.147	.013	1
Group II	Marital duration	1			
	Years of Teaching	.727**	1		
	Emotional Score	-.321	.952*	1	
	Behavioral score	.241	.085	-.413	1
Control	Marital duration	1			
	Years of Teaching	0.59	1		
	Emotional Score	0.34	0.67	1	
	Behavioral score	0.49	0.024	0.42	1

The above table 20 reveals that in Group I there is a positive correlation between years of teaching and marital duration. In Group II there is a positive correlation between emotional score and years of teaching. In both Experimental groups I & II emotional scores and years of teaching are correlated.

Table 21: Comparison of skill scores of Pre-test, Post-test I & Post-test II and of Kruskal-wallis Test between Group I, Group II & Control Group

						N=75
Test		Group	Mean Rank	Kruskal-wallis Test	P Value	
PRE-TEST	Emotional Score	Group I	32.14	4.48 ^{NS}	0.124	
		Group II	35.65			
		Control	27.32			
	Behavioral score	Group I	33.12	4.85 ^{NS}	0.154	
		Group II	35.82			
		Control	29.84			
POST-TEST I	Emotional Score	Group I	47.28	13.87 ^{**}	0.001	
		Group II	40.68			
		Control	26.04			
	Behavioral score	Group I	47.38	7.54 [*]	0.023	
		Group II	35.22			
		Control	31.4			
POST-TEST II	Emotional Score	Group I	43.02	22.9 ^{**}	0	
		Group II	48.92			
		Control	22.06			
	Behavioral score	Group I	43.6	6.05 [*]	0.032	
		Group II	38.94			
		Control	31.46			

Table 21 reveals that the pre-test knowledge scores of all three groups when subjected to Kruskal-wallis Test, was found to be non-significant for both emotional score and Behavioral score. However the post-test I and post-test II knowledge scores for both emotional score and Behavioral score were found statistically significant for post-test I and post-test II respectively.

Correlation between knowledge and skill

The correlation between knowledge score and skill scores were studied by computing Karl Pearson's correlation coefficient 'r'.

The result indicated that there was a positive correlation between knowledge and skill ($r=0.461$) and this was statistically significant ($p < 0.01$). Thus indicating that, an increase in the knowledge will bring an increase in the skill level, meaning that more the knowledge better is the skill in identification of common mental health problems of school children.

"Don't be afraid to take a big step if one is indicated. You can't cross a chasm in two small jumps."

David Lloyd George



CHAPTER V

DISCUSSION

5.1 Background

Children form a vital and vulnerable segment of the population. The health of the school child is the responsibility of parents, teachers, health administrators and the community. The teacher plays a significant role in the promotion of the health of the children under his/her care. Teachers spend most of the school hours with children and are familiar with them. They can detect at the earliest the signs and symptoms of common mental health problems in the classroom setting. The teacher who is a member of the school health team has a greater role to play in the effective implementation of the programme. Hence the teacher should equip herself/ himself with necessary knowledge of common mental health problems of school children.

With this back ground a study was undertaken to assess the effectiveness of Structured Educational Modules for Primary School Teachers on the Knowledge and Skills in identification of Common Mental Health Problems in Selected Schools of Bangalore District.

5.2 This chapter presents the discussion of the study findings

The discussion is based on demographic variables of the subjects, objectives, hypothesis, related literature and conceptual frame work of the study and findings are discussed by comparing the findings of studies already undertaken in this area.

Demographic variables of Subjects.

Age: It is evident from the result (Table-1) that majority of the subjects across groups (Group I 47%; Group II 48% and Control Group 46%) belong to the age group of more than 40 years which is a productive age in terms of socio-economic development, followed by 31-40 years across the groups (Group I 43%; Group II 40% and Control Group 46%). However the analysis showed that all three groups, Group I, Group II and Control Group were matched and comparable ($X^2 = 4.20^{NS}$).

Gender: The Table No-1 shows that, majority of the subjects were females across groups (Group I 68%; Group II 78% and Control Group 64%) compared to males across groups (Group I 27%; Group II 23% and Control Group 36%).

Marital status: The Table-No-1 shows that majority of the subjects across groups (Group I 98%; Group II 95% and Control Group 92%) were married.

Educational level: The Table No-1 reveals that majority of the subjects across groups (Group I 98%; Group II 100% and Control Group 93%) had undergone TCH Training. However, in Group I 1%; Control Group 8% and nil in Group II subjects had undertaken Diploma in Education. Subjects in Group I 1%; Control Group 3% and nil in Group II had pursued their education and qualified as graduates with B.Ed degree. However, in Group I 7%; Group II 6% and Control Group 7% had graduated with BA degree. In Control Group 3% of them had a Post graduate degree. It showed that the teachers had interest in and dynamic ability to keep in level with advancing technology and science as well as to get promotion in their teaching career. The statistical analysis showed that all three groups, Group I, Group II and Control Group were matched and comparable ($X^2 = 2.14^{NS}$).

Years of Teaching: The Table No-1 shows that majority of subjects across groups (Group I 92%; Group II 91% and Control Group 89%) had experience of teaching above 6 years.

Type of Family: The Table No-1 shows that majority of the subjects across groups (Group I 88%; Group II 89% and Control Group 73%) had Nuclear type of family.

Religion: The Table No-1 shows that majority of the subjects across groups (Group I 87%; Group II 87% and Control Group 85%) were followers of Hinduism.

Income (Rs/month): It is evident from Table.No-1 majority of the subjects across groups (Group I 56%; Group II 48% and Control Group 60%) had income from Rs. 10,000-Rs. 15,000 respectively.

Considering these facts the investigator felt that there was a compelling need to develop a Structured Teaching and Self-Instructional Module based on the identified learning needs of Primary School Teachers. It is essential for the Primary School Teachers to refer and use in their daily practice. Therefore engaging these people in health activities of the School Health Services which will reduce the cost of Primary health care and help in reaching the goal of health for all by 2015 A.D.by their active participation.

5.1. The first objective was to determine the pre-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.

The pre-test was administered prior to provision of Structured Teaching Module to Group I and Self-Instructional Module to Group II and no intervention to Control Group. The pre-test mean of knowledge scores of Group I was 20.2(SD 1.7), Group II

was 19.84 (SD 1.51) and that of Control Group was 20.23 (SD 1.81). The pre-test knowledge scores across the groups was found to be non-significant ($F=2.26$; $p>0.105$).

Dimension wise pre-test knowledge score showed statistical difference in emotional disorder ($F=16.09$; $p>0.01$), developmental disorder ($F=9.6$; $p>0.01$), eating disorder ($F=7.67$; $p>0.01$), habit disorder ($F=2.39$; $p>0.01$) respectively. However conduct disorder ($F=0.78$; $p=0.46^{NS}$) and hyperkinetic disorders ($F=1.47$; $p=0.23^{NS}$) mean score levels showed non-significance.

Comparison of means with the corresponding mental health disorders like emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders and the results indicate that there is an increasing trend in the control compared to group 1 and 2 with respect to both emotional and developmental disorder and there is an increasing trend with respect to group 1 and 2 in eating and habit disorders. That is before conducting any test these disorders were significantly affecting the groups. So while formulating the decision about the mental health of the children, there is a need to concentrate on these variables rather than others.

In order to find out the skill scores of the subjects on identification of common mental health problems the statistical computations carried out revealed that there was no significant difference between the gender, marital status and years of teaching. However, age group characteristic alone was found to be significant. The pre-test skill scores of mental health disorders were compared between the groups to know whether they were statistically significant or not. The results showed there was statistical difference in emotional disorder, developmental disorder, eating disorder, habit disorder.

The findings of the above study was consistent with the following studies

A study was done on Chinese primary school children to determine levels of behavior problem and to explore key determinants relevant to the Chinese context. The

investigator examined 2,203 child-parent pairs and administered a child self-completion questionnaire to children aged 7-13 and Rutter Parent Scales to their parents in nine primary schools. Results showed that 13.2% of the children (16.4% of boys, 9.4% of girls) had a behavior problem. Girls manifest more emotional problems (5.3 vs. 2.3%) and boys more conduct problems.³⁵

A study was conducted in Athens among Greek primary teachers. This study aimed to identify the types of emotional and behavioural difficulties which were found to be problematic in their teaching; and also to identify their perceptions of the prevalence of these difficulties. A Behaviour Inventory was administered to 170 elementary teachers from 23 randomly selected schools. Analysis showed that teachers found 'work avoidance', 'depressive mood', 'negativism', 'physical aggression' and 'lack of concentration' as most problematic. By contrast, it was found that 'excessive shyness' and 'attention seeking' as least problematic. However, only one of the most problematic behaviours, 'lack of concentration', was among the highly frequent behaviours. The other highly frequent behaviours were 'talking without permission', 'untidiness' and 'fidgeting'. The least frequent behaviours were 'over-dependence on teacher' and 'school phobia'. The findings are discussed in terms of historical and international patterns and trends in teachers' perceptions of emotional and behavioural difficulties. The significance of the study for the professional development of teachers and for policy-makers was also examined.⁸²

This study investigated the ability of primary school teachers to recognise and refer children with anxiety symptoms. Samples were two hundred and ninety-nine primary school teachers who completed a questionnaire exploring their recognition and referral responses to five hypothetical vignettes that described boys and girls with varying severity of anxiety symptoms. Results revealed that teachers were generally able to recognise and make the decision to refer children with severe levels of anxiety.

However, it was found that they had difficulty distinguishing between children with moderate anxiety symptoms and a severe anxiety disorder. Female teachers were more likely to refer children than male teachers.⁸³

This inadequate knowledge among Primary School teachers may be because of lack of special educational courses, inadequate experience and less opportunities for in-service or continuing education programmes to update their knowledge and skill in identification of common mental health problems.

5.2. The second objective was to administer Structured Educational Modules I and II on knowledge and skills related to identification of common mental health problems of primary school children.

Structured Educational Module I for Experiment Group I (Structured Teaching) and Structured Educational Module II (Self Instructional Module that is ST only) for Experiment Group II on knowledge and skills related to identification of common mental health problems of primary school children was administered.

The findings of the above study was consistent with the following studies

A study was conducted in Salem to evaluate the effectiveness of planned teaching programme on knowledge of school teachers regarding management of hyperactive students. The sample selected for the study was a cohort group of 40 teachers, teaching from 1st to 7th standard of selected private schools. A structured questionnaire with 40 items to assess the knowledge was prepared and pre-test was conducted on 1st day, after obtaining written permission. Planned teaching programme in the same day after pre-test and the post-test was conducted on the 9th day. The study result revealed the mean difference between pre-test (14.6) and post-test score (30.5) and the difference was significant ($t=16.03$, $p<0.01$).¹⁰⁹

A clinical study was conducted in Ranchi. To assess the effectiveness of planned teaching programme for the care takers of children admitted with minor mental health disorders in the Child Psychiatry wards of Central Institute of Psychiatry. A total of 80 samples was selected by convenient sampling technique. The outcome of the study showed a marked increase in the knowledge level of the caretakers after the intervention.¹¹⁰

5.3. The third objective is to assess the post-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.

The overall and across the dimensions post-test I and post-test II knowledge scores between the groups were compared for statistical significance. The post-test I was administered 7 (Seven) days after the provision of treatment i.e. Structured Teaching Module to Group I and Self-Instructional Module to Group II and no intervention to Control Group. The Post-test I mean of knowledge scores of Group I was 39.3(SD 2.26), Group II was 38.21 (SD 2.26) and that of Control Group was 21.45 (SD 1.9). The pre-test knowledge scores across the groups was found to be significant ($F=2203.37$; $p>0.01$).

Dimension wise Post-test I knowledge score showed statistical difference in emotional disorder ($F=123.91$; $p>0.01$), Conduct Disorder ($F=247.6$; $p>0.01$), hyperkinetic disorders ($F=242.87$; $p=0.01$), developmental disorder($F=130.31$; $p>0.01$), eating disorder($F=293$; $p>0.01$) and habit disorder($F=369.73$; $p>0.01$) respectively.

The post-test II was administered 30 (Thirty) days after the provision of treatment i.e. Structured Teaching Module to Group I and Self-Instructional Module to Group II and no intervention to Control Group. The Post-test II mean of knowledge

scores of Group I was 44.78(SD 2.73), Group II was 48.56 (SD 2.44) and that of Control Group was 23.53 (SD 1.24). The pre-test knowledge scores across the groups was found to be significant ($F=4378.27$; $p>0.01$).

Dimension wise Post-test II knowledge score showed statistical difference in emotional disorder ($F=197.6$; $p>0.01$), Conduct Disorder ($F=339.8$; $p>0.01$), hyperkinetic disorders ($F=474.9$; $p=0.01$), developmental disorder($F=309.9$; $p>0.01$), eating disorder($F=403.7$; $p>0.01$) and habit disorder($F=126.3$; $p>0.01$) respectively.

The results showed there were statistical significance in overall Post-test I & Post-test II knowledge scores across the dimensions in Group I and Group II. That there is comparison of mean with the corresponding mental health disorders like emotional disorder, Developmental disorder, Eating disorder, Habit disorder, conduct disorder and hyperkinetic disorders, indicates that there is an increasing trend in the groups 1 and 2 with respect to all disorders compared to control group.

A similar study on preventing conduct problems, promoting social competence: a parent and teacher training partnership reflected similar findings.²³

The overall post-test I and post-test II skill scores across the groups were compared for statistical significance. The results showed there was statistical significance in overall skill scores of Group I and Group II. The subjects were able to identify both emotional and behavioral disorders in children. A similar study on emotional and behavioral problems in children based on parent, teacher and child reports supported the findings.²⁸

The findings of the above study was consistent with the following studies:

A study was conducted in NIMHANS, Bangalore by Child mental health team on teachers' knowledge of children's exposure to family risk factors using the Family Risk Factor Checklist. Data collected for 756 children indicated that teachers had accurate

knowledge of children's exposure to factors such as adverse life events and family socioeconomic status, which predicted children's mental health problems at 1 year follow-up. For children at high teacher-rated risk, odds ratios ranged from 3.04 to 7.46, after adjusting for prior mental health problems. Teachers had a poor knowledge of internal family functioning, such as conflict, parenting practices, or parental drug abuse. The findings suggest that asking teachers to report children's exposure to particular family risk factors is a feasible method for identifying children for selective interventions, but improved family-school communication may further enhance this process.⁸⁴

This study questioned 198 British primary teachers and reported a remarkable consensus among the respondents that 'talking out of turn' and 'hindering other children' were most troublesome and most frequent in classrooms. When teachers' attention was turned to particularly troublesome children, they identified a range of behaviours, such as 'disobedience', 'idleness/slowness' and 'physical aggression'. Moreover, a striking finding of this research was the fact that 51 per cent of all teachers and a larger proportion of women than men admitted that they spent more attention than they ought on problems of order and control. The findings of the present reflected the use of teacher assessments in screening for learning disabilities in a longitudinal study. 603 children were rated by the teachers in the II grade (8 to 9 years) and the ratings were correlated with examinations of reading, spelling and intelligence in III grade. The III grade testing for reading, spelling and intelligence classified children into groups with low achievement and dyslexia and these two groups were compared with normally achieving children. The accuracy of teacher assessment, measured with correlation analysis. ROC (Receiver Operating Characteristics) curves and kappa indices showed that teachers were quite accurate in their judgment of low achievement, but somewhat less efficient in their judgment of specific reading difficulties. Teacher quality is another variable that has a significant impact on pupils' overall achievement scores. It was found that teacher

education/ qualification was the most important determinant of students' achievement in both advantaged and disadvantaged regions. Teacher experience was found to be an important predictor of student achievement in major empirical studies. Studies have reported a negative correlation between multi grade teaching and learning outcomes.⁸⁵

An exploratory study was conducted in Dharwad city. The aim of the study was to assess the prevalence of learning difficulties/disabilities among primary school children and their effect on emotional problems and academic achievement.. A sample of 198 children (110 with learning difficulties and 88 without learning difficulties) was drawn from 3 selected English medium schools studying in 3rd and 4th standards. A writing test was administered to know the learning difficulties/disabilities. Emotional problems were assessed through teachers ratings using emotional problem scale developed by Prout and Strohmer (1985) and two semesters grades were obtained from school records to know the academic achievement of selected children. Results revealed that prevalence was found to an extent of 21 per cent, among which 17 per cent of children had learning difficulties and 4 per cent had a learning disability. The learning disabilities were found in writing errors such as substitutions, reversals, omissions, other than punctuation errors and wrong capitals etc. Boys had 2-4 times more learning difficulties / disabilities than girls. The learning difficulties were due to factors such as change in medium of instruction and number of hours spent by parents for coaching at home.⁶⁰

A study on Knowledge about ADHD was relatively low. 46.9% of teachers agreed that ADHD is due to biological and genetic vulnerabilities and causation. 53.1% of all the teachers considered ADHD to be the result of parental spoiling. The attitude score towards ADHD children was also low. 64.8% agree that the same disciplinary rules used for other students should also be applied to ADHD children. 77.6% believe that ADHD students experience difficulties in their relations with their classmates. There was a significant correlation between teachers' knowledge of ADHD and their attitude. The

main sources of knowledge about ADHD were: Television and radio; friends and relatives; periodical, newspapers and magazines. These findings were reflected in the present study.⁹²

5.4. The fourth objective is to find out the effectiveness of different modes of Structured Educational Modules I [ST + SIM] and II [SIM] between the Groups I and II and compare with Control Group [no intervention] of the subjects in identification of common mental health problems of primary school children.

Group I post-test I and post-test II knowledge and skill scores were statistically non-significant. Table-10 revealed the aspect wise post-test mean knowledge scores of subjects on selected mental health problems. The findings indicated that Group I Post-test I and II mean knowledge scores of overall selected subjects on selected mental health problems was non-significant (paired 't' test=4.21^{NS}; $p>0.05$). The highest knowledge mean score of subjects were found in the aspect of knowledge about habit disorder 35.08, followed by conduct disorder 33.17, eating disorder 32.59 and the lowest was 27.67 found in emotional disorder.

Null hypothesis HO_1 was rejected and the research hypothesis H_1 was accepted. This indicates that the Structured Teaching on identification of common mental health problems had been accepted. This also indicates that there is no significant difference in the mean pre and post-test knowledge and skill scores of the control group not exposed to routine intervention.

Both the Structured Educational Module I administered for Group I and Structured Educational Module II administered for Group II were effective in increasing the knowledge and skill of primary school teachers with regards to common mental health

problems. The research hypothesis H_4 has been accepted and the null hypothesis HO_4 has been rejected.

A study aimed to identify the prevalence and associations of childhood psychiatric disorder in Calicut District, South India was conducted. Among 1403 children aged 8 to 12 years selected by random cluster sampling, a projected prevalence of 9.4% (95% CI 7.9–10.8%) was found. Association of disorder with male sex, the Muslim religion, lower social class, less parental education, school failure, and impaired reading and vocabulary were found, but not with malnutrition or perinatal problems.⁵⁷

There is a trend in Indian higher education towards using educational technologies. These educational technologies challenge the notion that education needs to take place in a classroom. One force driving these educational technologies is the demand for a well-educated and skilled workforce. Another force is older, more mature students. Further, some people are disadvantaged due to geographic remoteness or restricted by their work schedule and need distance learning methods. This provides learners a more flexible way to further their education. As such, it is the fastest growing educational modality trying to develop new ways to provide education that is accessible to the whole population. Thus, in the present study self-instructional module (SIM) has proved to be more effective than the structured teaching (ST).

The findings of the above study was consistent with the following studies:

A study was conducted in the state of Madhya Pradesh, India that research is being put in to practice through teacher empowerment project. As many as 500 teachers per day (at first 23 school district and now moving into 45 districts and 77000 schools) attend seminars in which they develop new learning material and strategies and provide peer demonstration. The focus is on giving teacher decision making power, thereby enabling them to control the changes in their class room and build their self-

confidence and status in the community. The project is coupled with seminar for local education official and school heads and low cost improvement in school environments. Preliminary results point to large increase in attendance and learning retention among students as well as increased empowerment, participation and satisfaction among teachers.¹⁰⁷

5.5. The fifth objective is to measure the association between knowledge and skills of the subjects in identification of common mental health problems of primary school children.

The results showed that only emotional and behavior skills are correlated and statistically significant. Table No. 15 was computed to know the co-relation between knowledge scores and skill scores. The results showed that Emotional and behavior skills are positively correlated and problems for primary school teachers was an effective method for increasing the knowledge and skill of primary school teachers on common mental health problems.

Group II post-test I and post-test II knowledge and skill scores were statistically significant. Table-10 revealed the aspect wise post-test mean knowledge scores of subjects on selected mental health problems. The findings indicated that Group II Post-test I and II mean knowledge scores of overall selected subjects on selected mental health problems were significant (paired 't' test=9.47*; p=0.05). The highest knowledge mean score of subjects were found in the aspect of knowledge about emotional disorder 36.08, followed by conduct disorder 33.5, habit disorder 33.08 and the lowest was 26.16 found in eating disorder.

The null hypothesis H_{O2} was rejected and the research hypothesis H_2 was accepted. This indicates that the Self Instructional Module on identification of common

mental health problems for primary school teachers was an effective method for increasing the knowledge of primary school teachers on common mental health problems.

Group II post-test I and post-test II of knowledge and skill scores were statistically significant. The null hypothesis HO_2 was rejected and the research hypothesis H_2 was accepted. This indicates that the Self Instructional Module on identification of common mental health problems for primary school teachers was an effective method for increasing the knowledge and skill of primary school teachers on common mental health problems.

Control Group post-test I and post-test II knowledge and skill scores were statistically non-significant. Table-10 revealed the aspect wise post-test mean knowledge scores of subjects on selected mental health problems. The findings indicated that Control Group II post-test I and II mean knowledge scores of overall selected subjects on selected mental health problems was significant (paired 't' test=5.21^{NS}; $p=0.09$). The highest knowledge mean score of subjects were found in the aspect of knowledge about conduct disorder 2.75, followed by emotional disorder 2.33, eating disorder 1.83 and the lowest was 1.42 found in habit disorder.

The control group post-test I and post-test II for knowledge score was statistically non significant. The research hypothesis H_3 was rejected and the null hypothesis HO_3 was found to be statistically significant. However, emotional scores and knowledge scores were negatively correlated with each other and statistically insignificant.

The findings of the above study was consistent with the following study:

This finding is supported by an epidemiological study of child & adolescent psychiatric disorders in urban & rural areas. As discussed above, it is evident that any

informal or self-learning materials available in the specialized areas like School mental health motivate and help the primary school teachers to update their knowledge. It is also found that irrespective of their age, marital status, general education, professional qualification, income, years of teaching and income, easy availability and accessibility of the independent learning materials improve the knowledge and skills of primary school teachers so that they can provide quality and competent care to the school children.³³

A study was conducted in central Al Ain city, Abu Dhabi Emirate, United Arab Emirates to estimate the prevalence of behavior disorders and to determine whether and how these were associated with the age, gender, nationality, grade and scholastic performance of children. A multi-stage random sample of primary school children was screened with the Rutter's Scale Proforma B. Nearly 2100 boys and girls, aged between 5.4 to 16.6 years (13.5%), showed some form of behavior disorder. The overall prevalence of disorders was significantly higher in boys than in girls (16.3% & 10.2% respectively). Emotional, conduct and undifferentiated disorders were noted in 4.8%, 6.9% and 1.8% of all children respectively. Conduct disorder was significantly common in boys than in girls (9.3% & 4.1% respectively). In multivariate logistic regression analyses, different disorders were significantly associated with gender and/or grade and/or scholastic performance with the odds being the lowest in girls, in children in grades 3 to 6, and in children with excellent or very good scholastic performance. Nationality was not significantly associated with behavior disorders in the children studied. A considerable proportion of young children in Al Ain manifest showed signs of behavior disorders in primary school. The study recommended that the Primary school children in Al Ain and comparable areas should be screened for behavior disorders, and those found positive by screening tests should be assessed by health professionals to confirm the presence or absence of behavior disorders which need expert care.¹⁴

5.6. The sixth objective is to know the relationship between pre-test and post-test knowledge and skills score with the socio demographic variables of the subjects in identification of common mental health problems of primary school children.

Results indicated that years of teaching was the most contributing demographic variable on knowledge scores followed by marital duration. There was no significant association between gain in knowledge and gender and marital status.

The correlation between knowledge score and skill scores were studied by computing Karl Pearson's correlation coefficient 'r'.

The result indicated that there was a positive correlation between knowledge and skill($r=0.461$) and this was statistically significant ($p < 0.01$). Thus indicating that, an increase in knowledge will bring an increase in skill level, meaning that more the knowledge, better is the skill in identification of common mental health problems of school children.

A study conducted on tying together research and practice using ROPE for successful partnerships in school mental health stated that there is solid evidence for strategies and programs that, if implemented in schools, will enhance the mental health of children and youth. These practices are, however, inconsistently applied and rarely evaluated in every day practice. In recent years, implementation variables that influence uptake have received attention. An emerging area of interest is the role that research partnerships might play in narrowing the gap between science and practice. Drawing on the literature and practice examples, collaborators from the United States and Canada explored

the role of partnerships in bringing the worlds of research and practice closer into alignment.⁶⁷

Research carried out over more than 30 years demonstrates that teacher will adopt an innovation to the extent that first addresses their concern about changes asked of them in class room management and practice and then addresses the impact on the students. Without meeting the first requirement, new practices, no matter how innovative are unlikely to be adopted and sustained.¹⁰⁵

A study was conducted in US between 1986 and 1989. The Centers for Disease Control and Prevention sponsored the study (50,000 students and 150 teachers in seven states). Evaluation of the teenage health teaching module, a comprehensive school health curriculum for grades 7 to 12 was implemented. The evaluation demonstrated improvements in health related knowledge, attitude and self-reports of some behavior. One of the most significant finding was that teacher training was a crucial factor in the use of curriculum in the students outcome. Untrained teacher did not share the same gain.¹⁰⁶

**“Do not go where the path may lead,
go instead where there is no path and leave a trail.”**

- *Waldo Emerson*



CHAPTER VI

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATION, LIMITATION AND RECOMMENDATIONS

This chapter presents summary, conclusion, implications, recommendations and limitations for the study conducted to evaluate the effectiveness of Structured Educational Modules for Primary School Teachers on the Knowledge and Skills in Identification of Common Mental Health Problems in Selected Schools of Bangalore District.

There is a growing evidence base on what schools need to do to promote mental health effectively. There is strong evidence that they need first and foremost to use a whole school approach. This shapes the social contexts which promote mental health and which provide a backdrop of measures to prevent mental health disorders. In this context the targeting of those with particular needs and the work of the specialist services can be much more effective. Schools need to use positive models of mental health, which emphasize wellbeing and competence not just illness; this will help overcome problems of stigma and denial and promote the idea of mental health as 'everyone's business'. The most effective programmes in schools which address mental health have the following characteristics:

- ❖ They provide a backdrop of universal provision to promote the mental health of all and then target those with special needs effectively.
- ❖ They are multi-dimensional and coherent.

- ❖ They create supportive climates that promote warmth, empathy, positive expectations and clear boundaries.
- ❖ They tackle mental health problems early when they first manifest themselves and then take a long term, a developmental approach which does not expect immediate answers.
- ❖ They identify and target vulnerable and at risk groups and help people to acquire the skills and competencies that underlie mental health.
- ❖ They involve end users and their families in ways that encourage a feeling of ownership and participation, and provide effective training for those who run the programmes, including helping them to promote their own mental health.

Using these starting points, there is a need to develop a rigorous evidence-based approach on this issue. Facilitation of the dissemination of such research findings while encouraging new and innovative approaches is the need of the hour.

6.1 Summary

The primary aim of the study was to “Assess the Knowledge and Skills of Primary School Teachers in Identification of Common Mental Health Problems in School Children”

6.2 Objectives of the study:

1. To determine the pre-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
2. To administer Structured Educational Modules I and II on knowledge and skills related to identification of common mental health problems of primary school children.
3. To assess the post-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.

4. To find out the effectiveness of different modes of Structured Educational Modules I [ST + SIM] and II [SIM] between the Experimental Groups I and II and compare with Control Group [no intervention] of the subjects in identification of common mental health problems of primary school children.
5. To measure the association between knowledge and skills of the subjects in identification of common mental health problems of primary school children.
6. To know the relationship between pre-test and post-test knowledge and skills scores with the socio demographic variables of the subjects in identification of common mental health problems of primary school children.

6.3 The study attempted to examine the following Research Hypotheses

- H₁:** There is a significant difference in the mean pre and post-test scores of the subjects exposed to Structured Educational Module I.
- H₂:** There is a significant difference in the mean pre and post-test scores of the subjects exposed to Structured Educational Module II.
- H₃:** There is a significant difference in the mean pre and post-test scores of the control group not exposed to intervention.
- H₄:** There is a significant difference in the mean pre and post-test scores between Group I and Group II who are exposed to Structured Educational Modules I and II with that of Control Group not exposed to Structured Educational Modules I or II on knowledge and skills of the subjects in identification of common mental health problems of primary school children.
- H₅:** There is a significant association between pre and post-test knowledge and skills scores with the socio-demographic variables of the subjects in identification of common mental health problems of primary school children.

The conceptual frame work adopted for the study is based on the context, input, process and product (CIPP) model of Stufflebeam. It consists of a four step model of programme evaluation developed for obtaining information for taking decisions. It provides comprehensive, systematic and continuously ongoing framework for programme evaluation.

The study was conducted in Anekal Taluka of Bangalore Urban district of Karnataka State, Bangalore. By using probability and stratified cluster sampling, 360 Primary School teachers were selected to assess the effectiveness of structured teaching modules.

6.4 Review of literature was organized as follows:

- ❖ Studies related to common mental health problems in Primary school children.
- ❖ Studies related to effect of school mental health programme in the management of common mental health problems in primary school children.
- ❖ Studies related to knowledge and skill of teachers in the management of common mental health problems in primary school children.
- ❖ Studies related to effect of Structured Teaching in the management of common mental health problems in primary school children.
- ❖ Studies related to effect of Self Instructional Module in the management of common mental health problems in primary school children

The research approach selected for the study was the evaluating approach. The research design chosen for the present study was quasi experimental with three group pre- post-test design. Independent variable in the study was structured teaching programme and Self Instructional Module (both are the same) and dependent variables were knowledge and skill scores.

The tool developed and used for data collection was self-administered knowledge questionnaire to assess the knowledge of subjects on common mental health problems which consisted of 60 items.

Section I: Socio-demographic profile (consists of 13 items).

Section II: Self-administered Knowledge Questionnaire (consist of 60 items).

For these 60 Items, 60 was the maximum score. Each question had 4 options, out of which one option was appropriate; each correct answer got one score and wrong answer got a zero score

Section III: Rutter's scale Proforma B

For identification of common mental health problems of primary school children, Rutter's Scale Proforma B which consists of 26 description of behavior was used. It had an overall score of 52.

The steps involved in the development of instruments were preparation of blue print, construction of items/statements on knowledge and skill of identification of common mental health problems, Pre-testing and testing for reliability and validity.

Content validity of the tool was established after consulting experts in nursing, the guide and co guide, the statistician, the research advisory committee members and experts in the field of study.

Reliability of the tool was established by conducting a pilot study. The reliability of knowledge was tested by test-retest method. The score was ($r=0.835$). The skill scale has been shown to have a high test retest reliability of 0.79 over a three month period and inter rater reliability of 0.72.

Pre-testing of the tool was done on a sample of 36 subjects who were similar in characteristics to those of the subjects under study, to check the clarity of the items, their feasibility and practicability.

Structured Educational Modules consisting of six components namely, Emotional Disorder, Conduct Disorder, Hyper kinetic Disorder, Developmental disorder, Eating disorder, Habit disorder was administered.

Effort was made to develop structured educational modules, based on Primary School teachers knowledge and skills in identification of common mental health problems among primary school children.

A pilot study was conducted. The sample of the pilot study is not included for the main study. The result revealed that the structured teaching programme prepared for primary school teachers to enhance their knowledge and skills in identification of common mental health problems was effective in gaining knowledge and the modified skill of identification of common mental health problems in primary school children as well as revealed, that the study is feasible to conduct.

Structured teaching plus SIM for Group I and Self Instructional Module only for Group II and no intervention for Control Group.

Post assessment done on Knowledge and skills in identification of common mental health problems of primary school children in Experiment Group I, Group II and Control Group on the 7th day and 30th day after treatment.

6.4 The significant findings of the study

6.4.1. Demographic Characteristics of Subjects

Majority of the subjects were females, who were married, had TCH training and had above 6 years of teaching experience. They had nuclear families, followed Hinduism, and earned between Rs.10, 000 to Rs. 15,000 per month. The statistical computations carried out revealed that there was no significant difference between the characteristics of three groups as they were drawn from the same population.

This study revealed that nearly 40% of the teachers were in the age group of 30-40 years, which is a productive age in terms of socio-economic development. Therefore engaging these people in health activities of the school Health services, will reduce the cost of Primary Health Care and help in reaching the goal of health for all by 2015 A.D.by their active participation

6.4.2 Respondent's knowledge and skill of mean score on common mental health problems

The pre-test knowledge scores across the groups were found to be non-significant.

The pre-test mean knowledge scores across the six dimensions between groups showed there is a statistical difference in emotional disorder, developmental disorder, eating disorder and habit disorder.

The pre-test mean skill scores between groups showed there is statistical difference in emotional disorder, developmental disorder, eating disorder, habit disorder.

6.4.3 Domain wise Pre-test and post-test knowledge and skill mean score on common mental health problems.

The post-test I and post-test II knowledge scores were found statistically significant for Group I and Experiment Group II. The post-test I and post-test II knowledge scores across groups showed there is a statistical significance in all the six dimensions.

Emotional and behavioral disorder scores in post-test I and post-test II skill scores were found statistically significant for Group I and Experiment Group II.

6.4.4 Association between knowledge, skill and selected demographical variables

It was found that years of teaching is the most contributing demographic variable on knowledge scores followed by marital duration.

The results showed that emotional and behavior disorder score were correlated and statistically significant.

6.5 Conclusions

The education of teachers has to be considered as an integral part of the system of education. It has to focus its attention on the new role of teacher educator. Hence education is a potent instrument for bringing about the desired changes in the society and teachers are to play a crucial role in this noble venture. Human rights can be achieved and sustained mostly through education and training.

6.5.1 The findings of the study have following implications.

6.5.1.1 Nursing implication

The findings of the study imply that the primary school teachers need to be scientifically educated in identification of common mental health problems in relation to their causes, signs and symptoms, and role of a teacher in the prevention of these illnesses. Present study would directly help the Primary School Teachers to understand, gain and apply the knowledge of identification of common mental illnesses among school children. Early detection and treatment will help the child to lead a quality life and minimize the occurrence of major mental illnesses in their adult life.

6.5.1.2 Nursing Education

The present study emphasizes the enhancement of knowledge and skill of primary school teachers regarding common mental health problems of children with the help of structured teaching and self-instructional module. Therefore, the primary school teachers must have the adequate knowledge and skill regarding common mental health problems of children for providing better care to the child during school hours.

6.5.1.3 Nursing Practice

Structured Teaching (ST) & Self Instructional Module (SIM) on identification of common mental illnesses, for the Primary School Teachers should be made an ongoing continuing education process for school teachers by the Education Department.

6.5.1.4 Nursing administration

Nurse administrators should take an interest in motivating the primary school teachers to improve their knowledge and skill in identifying common mental health problems of children by attending workshops, seminars and training programmes.

The nurse administrator should arrange regular in service education programme on identifying common mental health problems of children. The structured teaching and self-instructional module developed by the researcher can be used as a reference material to uplift the teachers' knowledge on mental problems faced by children.

6.5.1.5 Nursing Research

All the research process steps were adopted while conducting the study, and the importance of research methodology was focused upon, which will strengthen the field of nursing research. The result of the study revealed that the tool used, structured teaching

and self-instructional module developed on common mental health problems of children contributes to the body of the knowledge in nursing. Other research conducting further study in the same field can utilize the suggestions and recommendations made through this research.

The outcome of the research may serve as a guideline in preparing other educational modules on common mental health problems of children in different settings as per the need appraised.

6.6 Limitations

- ❖ The study is limited to the primary school teachers of Anekal Taluka only.
- ❖ The period of data collection was limited to three times, if this could have been increased to multiple times, it would have enhanced the opportunity for the investigator to obtain further data.

6.7. Recommendations

Based on the findings of the study, it is recommended that

- ❖ A replication of the present study can be conducted with a large population.
- ❖ A study can be done to assess the knowledge, attitude and practice of primary school teachers who are working in Government, aided, non-government and unaided schools.
- ❖ A comparative study can be conducted to compare the findings of Government, aided, Vs non-government and unaided schools.
- ❖ A similar study can be conducted with different audio visual aids like video films, film strips on common mental health problems in primary school children.

- ❖ One month can be observed as “Prevention of childhood mental disorder month” and nursing students and health personnel can be involved to give programmes in the school.
- ❖ Child Guidance Counselors in schools and implement the social skills training for all children.

“You must be the change you want to see in the world.”

- Mahatma Gandhi



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“The only *way to find* the limits of the *possible* is by going *beyond them* to the *impossible*.”



APPENDIX 1

ಬೆಂಗಳೂರು ನಗರ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್
ಉಪನಿರ್ದೇಶಕರ ಕಛೇರಿ, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ದಕ್ಷಿಣಜಿಲ್ಲೆ, ಕಲಾಪಾಕಾಶ್ಯಂ, ಬೆಂಗಳೂರು-560002
ಸಂಖ್ಯೆ:ಆ.ಇ. ಪ್ರಕಾಶನ 2/2004-05. ದಿನಾಂಕ: 15 ನೇ ಏಪ್ರಿಲ್, 2006

ಸ್ಥಳೀಯ

ವಿಷಯ: ರೂ ಎಸ್.ಶಿಲ್ಪಿ ಡ್ಯಾಸಿಯಲ್, ಪ್ರಾಂಶುಪಾಲರು, ಸೆಂಟ್
ಮೇರಿ ಹರ್ಸಂಗ್ ಶಾಲೆ, ಹೆಬ್ಬಾಳ, ಬೆಂಗಳೂರು - ಎಚ್.ಬಿ.ಡಿ
ಪ್ರಬಂಧ ವಿಷಯದಲ್ಲಿ ವಿಶ್ವಕ ಅಭ್ಯಾಸ ನಡೆಸಲು ಅನುಮತಿ
ನೀಡುವ ಬಗ್ಗೆ -
ಉಲ್ಲೇಖ: ರೂ ಎಸ್.ಶಿಲ್ಪಿ ಡ್ಯಾಸಿಯಲ್, ಇವರ ಮನವಿ ದಿನಾಂಕ
18ನೇ ಮಾರ್ಚ್ 2003.

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ವ್ಯಕ್ತವಣಿ:

ರೂ ಎಸ್.ಶಿಲ್ಪಿ ಡ್ಯಾಸಿಯಲ್, ಪ್ರಾಂಶುಪಾಲರು, ಸೆಂಟ್ ಮೇರಿ ಹರ್ಸಂಗ್ ಶಾಲೆ, ಕೆಂಪಾಪುರ, ಹೆಬ್ಬಾಳ, ಬೆಂಗಳೂರು, ಇವರು ಉಲ್ಲೇಖದಲ್ಲಿ ಸೂಚಿಸಿದ ಮನವಿ ಪತ್ರವನ್ನು ಸಲ್ಲಿಸಿರುತ್ತಾರೆ. ತಮ್ಮ ಮನವಿಯಲ್ಲಿ, ಬೆಂಗಳೂರು ನಗರದ ನಿಮ್ಮಾಪ್ಪಿ ಆಸ್ಪತ್ರೆಯ ನರ್ಸಿಂಗ್ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥರಾದ ಡಾ. ನಾಗರಾಜಯ್ಯ ಅವರ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಎಚ್.ಬಿ.ಡಿ ಪ್ರೌಢ ಪ್ರಬಂಧಕ್ಕೆ ಮಾರ್ಗದರ್ಶನ ಪಡೆಯುತ್ತಿರುವುದಾಗಿರುವುದು, ಇದಕ್ಕೆ ಆನ್‌ಲೈನ್ ವಲಯವನ್ನು ತಮ್ಮ ಪ್ರಬಂಧದ ವಿಷಯಕ್ಕೆ ಆಯ್ಕೆ ಮಾಡಿಕೊಂಡಿರುವುದಾಗಿರುವುದು, ಸರ್ಕಾರಿ ಪ್ರಾಥಮಿಕ ಶಾಲೆಗಳಲ್ಲಿ ಸೇವೆ ಸಲ್ಲಿಸುತ್ತಿರುವ ಶಿಕ್ಷಕರಿಂದ ಲಗತ್ತ ಮಹಿತಿ ಸಂಗ್ರಹಿಸಿ, ಪ್ರೌಢ ಪ್ರಬಂಧ ರಚಿಸುತ್ತಿರುವುದಾಗಿರುವುದು, ಸದರಿ ಶಿಕ್ಷಕರ ಬೋಧನೆಗೆ ಯಾವುದೇ ರೀತಿಯಲ್ಲಿ ಅಡಚಣೆ ಆಗದಂತೆ, ತಮಗೆ ಲಗತ್ತವೆನಿಸಿದ ಶೈಕ್ಷಣಿಕ ಬೋಧನೆ ವಿಚಾರದಲ್ಲಿ ಮಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸುವುದಾಗಿರುವುದು, ಇದಕ್ಕೆ ಅನುಮತಿ ನೀಡಬೇಕೆಂದೂ ಕೋರಿರುತ್ತಾರೆ.

ಲಭ್ಯವಿರುವ ಅಂಶ ಅಂತರ್ಗತ ಪ್ರಕಾರ ಪ್ರತಿ ಹತ್ತು ಪ್ರಾಥಮಿಕ ಶಾಲಾ ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ಒಬ್ಬ ವಿದ್ಯಾರ್ಥಿ ಮಾನಸಿಕ ಖಾಯಿಲೆಯಿಂದ ನರಳುತ್ತಿದ್ದು, ಇದನ್ನು ಸ್ವಲ್ಪವಾಗಿ ಗುರುತಿಸಬಹುದು ಹಾಗೆಯೇ ಗುಣಪಡಿಸಲು ಸಾಧ್ಯವಿದೆ. ಈ ವಿಷಯವನ್ನು ಆಧರಿಸಿ ರೂ ಎಸ್.ಶಿಲ್ಪಿ ಡ್ಯಾಸಿಯಲ್, ಇವರು ತಮ್ಮ ಪ್ರೌಢಪ್ರಬಂಧವನ್ನು ನಿರ್ವಹಿಸುತ್ತಿದ್ದು, ಏಪ್ರಿಲ್ 2006 ರಿಂದ ಮಾರ್ಚ್ 2010ರ ವರೆಗೆ ಅವಧಿಯನ್ನು ನಿಗದಿಪಡಿಸಿಕೊಂಡಿರುತ್ತಾರೆ. ಈ ಅವಧಿಯಲ್ಲಿ, ಬೆಂಗಳೂರು ದಕ್ಷಿಣ ಜಿಲ್ಲೆಯ ಆನ್‌ಲೈನ್ ವಲಯದ ಎಲ್ಲವಿಷಯದಲ್ಲಿ ಸಂಚರಿಸುತ್ತಿರುವ ಶಾಲಾ ಶಿಕ್ಷಕರು ನಡೆಸುವ ಮಹಿತಿ ಸಂಗ್ರಹಣೆ, ಇವರು ಮುಖ್ಯಸ್ಥರಾದ ಡಾ. ನಾಗರಾಜಯ್ಯ ಅವರ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಸಮಾಲೋಚನೆ ನಡೆಸಿ ಪ್ರಬಂಧದ ವಿಷಯವಾಗಿ ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸಲಿದ್ದಾರೆ. ಇವರ ಈ ಅಧ್ಯಯನದ ವಿಷಯವು ಶಿಕ್ಷಣ ಕ್ಷೇತ್ರಕ್ಕೆ ಉತ್ತಮ ಕೊಡುಗೆಯಾಗಲಿದ್ದು ಪ್ರಾಥಮಿಕ ಶಾಲಾ ಶಿಕ್ಷಕರುಗಳಿಗೆ ಮಧ್ಯಮ ಮಾನಸಿಕ ಖಾಯಿಲೆಯನ್ನು ಬೋಧನೆಯ ಜೊತೆಗೆ ಗುಣಪಡಿಸಲು ಲಗತ್ತ ಸಲಹೆಗಳು ಸದರಿ ಅಧ್ಯಯನ ಸಮಯದಲ್ಲಿ ಲಭಿಸುತ್ತದೆಯೆಂದು ಭಾವಿಸಲಾಗಿದ್ದು, ರೂ ಎಸ್.ಶಿಲ್ಪಿ ಡ್ಯಾಸಿಯಲ್, ಇವರಿಗೆ ಎಚ್.ಬಿ.ಡಿ.ಅಧ್ಯಯನ ನಡೆಸುವ ಸಂಬಂಧದಲ್ಲಿ, ಆಯ್ಕೆ ಮಾಡಿಕೊಂಡ ಶಿಕ್ಷಕರುಗಳೊಡನೆ ಮತ್ತು ಶಾಲೆಗಳಿಗೆ ಭೇಟಿ ನೀಡುವುದಕ್ಕಾಗಿ ಅನುಮತಿ ನೀಡುವ ಈ ಆದೇಶ:

ಆದೇಶ

ಝಃ ಁಸ್ರರೂ ಶೀರ್ಲ ಡ್ಯಾನುಯಲ್, ಪೂಂಶುಪಾಲರು, ಸೆಂಟರ್ ಢೇರಿ ನರ್ಸಿಂಗ್ ಶಾಲೆ, ಹೆಬ್ಬಾಳ, ಬೆಂಗಳೂರು ಇವರಿಗೆ ರೀಳ ರಾಣಸಿದ ತರತುಗಳನ್ನು ಸೂಚಿಸಿ ಁಹೆಬ್.ಡಿ. ಲಧ್ಯಯನರೈ ಢಾಹಿತಿ ಸಂಗ್ರಹಿಸಲು ಲನುಢತಿ ನೂಡಿದೆ.

1. ಆನೇರಲ್ ವಲಯಕ್ಕೆ ಢಾತ್ರವೇ ಲಧ್ಯಯನ ಸೀಢಿತವಾಗಿರತಕ್ಕದ್ದು.
2. ಸರಾಠಿ ಪೂಢಮಿರ ಶಾಲಾ ಶಿಫ್ಟರ ಢಾಹಿರ ಸಬೆಗಳಲ್ಲಿ ಇವರು ಪೇಫ್ಟರಾಗಿ ಢಾತ್ರವೇ ಭಾಗವಹಿಸಬಹುದು, ಶಿಫ್ಟರುಗಳೂಡನೆ ಸಢಾಪೂಜನೆ ನಡೆಸಿ ಢಾಹಿತಿ ಪಡೆಯಬಹುದು.
3. ಶೈಫ್ಟಪೆರ ಪಢ್ಧತಿಗೆ ವಿರೂಢ ಁನಿಸುವ ಯಾವ ಲಂಶವನ್ನೂ ಇವರು ತಢ್ಢು ಪೂಬಂಧದಲ್ಲಿ ಸೇರಿಸುವಂತಿಲ್ಲ.
4. ಪೂಢಪೂಬಂಧದಲ್ಲಿ ಶೀಢ ಇಲಾಖೆ ನೂಡಿದ ನೆರವಿಗೆ ಕೃತಕ್ಕತೆಗಳನ್ನು ಸೂಚಿಸತಕ್ಕದ್ದು.
5. ಆನುಢತಿ ಁಪ್ಪಲ್ 2006 ರಿಂದ ಢಾರ್ಚ್ 2010ರ ವರೆಗೆ ಢಾತ್ರ ಜಾರಿಯಲ್ಲಿರುತ್ತದೆ.
6. ಁಹೆಬ್.ಡಿ. ಪೂಬಂಧ ಪೂರ್ಣಗೂಂಡನಂತರ ಂಢು ಪೂತಿಯನ್ನು ರಾಜ್ಯ ಶಿಫ್ಟ ಸಂಶೂಢನೆ ಢತ್ತು ತರಬೇತಿ ನಿರ್ದೇಶನಾಲಯ, ನಂ:4, 100 ಅಡಿ ರಿಂಗ್ ರೂಢಾಡೆ, ಬನಶಂಕರಿ 3ನೇ ಸ್ಟೇಜ್, ಬೆಂಗಳೂರು 560 085 ಇವರಿಗೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.

ಉಪನಿರ್ದೇಶರರು (ಅಧ್ಯಾಪಕ)

ದಕ್ಷಿಣಾಚಿಲ್ಲೆ 15/4

1. ಝಃ ಁಸ್ರರೂ ಶೀರ್ಲ ಡ್ಯಾನುಯಲ್, ಪೂಂಶುಪಾಲರು, ಸೆಂಟರ್ ಢೇರಿ ನರ್ಸಿಂಗ್ ಶಾಲೆ, ನಂ: 69/70, 4ನೇ ಢೆಯುನ್ ರಸ್ತೆ, ಪಂಪ ಁರ್ಟೆಟೆನ್ಷನ್, ರೆಂಪಾವುರ, ಹೆಬ್ಬಾಳ, ಬೆಂಗಳೂರು -- 560 024.
2. ಕ್ಷೇತ್ರ ಶಿಫ್ಟಾಢಿರಾರಿಗಳು, ಸಾರ್ವಜನಿಕ ಶಿಫ್ಟ ಇಲಾಖೆ, ಆನೇರಲ್ ವಲಯ, ಆನೇರಲ್ ಇವರು, ಝಃ ಁಸ್ರರೂ ಶೀರ್ಲ ಡ್ಯಾನುಯಲ್, ಪೂಂಶುಪಾಲರು, ಸೆಂಟರ್ ಢೇರಿ ನರ್ಸಿಂಗ್ ಶಾಲೆ, ಹೆಬ್ಬಾಳ, ಬೆಂಗಳೂರು ರವರಿಗೆ ಲವರ ಁಹೆಬ್.ಡಿ. ಲಧ್ಯಯನರೈ ಸಂಬಂಢಿಸಿದಂತೆ ಢಾಹಿತಿ ಸಂಗ್ರಹಿಸಲು ಸೂತ್ರ ಸಹರಾರವನ್ನು ನೂಡಲು ತಿಳಿಸಿದೆ.
3. ರಬೇರಿ ಪೂತಿ.

APPENDIX 2

[Letter granting permission to conduct the study]

[English Translation from the original in Kannada]

**Bangalore City District Panchayat
Deputy Director's Office, Sarvajanika Shikshana Department,
South District, Kalasipalyam, Bangalore-560002**

Ref: Aa 3, Pu Ka Ne 2/2006

Dated: 15th April, 2006.

MEMODRANDUM

Sub: Kum. Esther Shirley Daniel, Principal, St. Mary's Institute of Nursing,
Hebbal, Bangalore – Permission requested to conduct Ph.D study –
regarding.

Ref: Request letter dated 18th March 2006, from Kum. Esther Shirley Daniel.

= = = = =

With reference to the above letter, Kum. Esther Shirley Daniel Principal, St. Mary's Institute of Nursing, Hebbal, Bangalore has stating that under the Guideship of Dr. Nagarajaiah, Associate Professor, Department of Nursing, NIMHANS, Bangalore she intends to undertake her Ph.D study among the Government primary school teachers, Anekal Taluq. She will obtain prior consent from the teachers. She will conduct her study during the monthly meetings conducted by the Education Department without causing any problems to regular class teaching time. As and when necessary she will approach the school teachers at their place of work to gather information.

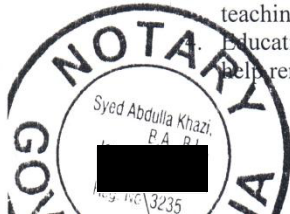
As statistics shows one in every ten children suffer from mental illness which can be easily recognised and treated. In this regard Kum. Esther Shirley Daniel, has requested the Education Department to grant her permission to conduct her Ph.D study from April 2006 to March 2010. During this period she will participate in the Government primary school teachers monthly meetings held at Bangalore South Zilla, Anekal Taluq, Anekal and interact with the teachers and collect the necessary information. She also will present a copy of her Ph.D thesis to the Education Department.

This study will empower primary school teachers with necessary knowledge and skills in identification of common mental health problems among school children. Permission has been requested regarding this.

PERMISSION

Kum. Esther Shirley Daniel, Principal, St. Mary's Institute of Nursing, Hebbal, Bangalore, has been granted permission to undertake her Ph.D studies on the following terms and conditions.

1. The study must be conducted only in Anekal Taluq.
 2. Information can be gathered from Government primary school teachers, Anekal Taluq, during their monthly meetings only after prior consent.
 3. If during the study any contradictory information is gathered regarding the teaching community, such information should not be furnished in the thesis.
- Education Department should be properly acknowledged for all the administrative help rendered.



APPENDIX 3
SRI RAMACHANDRA MEDICAL COLLEGE AND RESEARCH INSTITUTE
SRI RAMACHANDRA UNIVERSITY
PORUR, CHENNAI, TAMIL NADU.

KNOWLEDGE QUESTIONNAIRE & SKILL ASSESSMENT

Dear teacher,

I, Esther Shirley Daniel, am a Ph.D student and doing a dissertation on, “The Effectiveness Of Structured Educational Modules For Primary School Teachers On The Knowledge And Skills In Identification Of Common Mental Health Problems In Selected Schools of Bangalore District”. I request you to participate in this study. The information obtained will be confidential and anonymity will be maintained. If you would like to know the result of the study kindly let me know [Yes/ No].

INSTRUMENT:

Part I: Socio-demographic profile consisting of 14 items.

Part II: Knowledge component: Self-administered knowledge questionnaire on common mental health problems consisting of 60 items under the following headings:

- Emotional disorder.
- Conduct disorder.
- Hyper kinetic disorder.
- Developmental disorder.
- Eating disorder.
- Habit disorder.

Part III: Skill Component: Structured questionnaire on skill component; a standardized “Rutters” scale will be used. It consists of Performa A & B

Performa A consists of 9 questions, which taps the academic performance.

Performa B consists of 26 description of behavior.

I thank you for participating in this study and for making your valuable responses to the questions asked.

Thanking you,

Yours’ truly,

ESTHER SHIRLEY S

APPENDIX 4

Letter seeking expert opinion in validating tool and content

From

Prof. Esther Shirley Daniel, M.Sc [N].,

Ph.D. Nursing Student [Part time],

Sri Ramachandra Medical College and Research Institute [D.U]

Porur, Chennai.

To

Respected Madam / Sir,

I, Prof. Esther Shirley Daniel,, Final year Ph.D. Nursing student[Part time] of Sri Ramachandra Medical College And Research Institute [D.U], Porur , have undertaken a research project in partial fulfillment of Doctorate Degree in nursing programme.

The research topic and objectives of the study are as follows.

“The effectiveness of structured educational modules for primary school teachers on the knowledge and skills in identification of common mental health problems in selected schools of Bangalore district”.

Objectives of the study are:

1. To determine the pre-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
2. To administer Structured Educational Modules I and II on knowledge and skills related to identification of common mental health problems of primary school children.
3. To assess the post-test knowledge and skills of the subjects in identification of common mental health problems of primary school children.
4. To find out the effectiveness of different modes of Structured Educational Modules I [ST + SIM] and II [SIM] between the Groups I and II and Control Group of the

- subjects in identification of common mental health problems of primary school children.
5. To measure the association between knowledge and skills of the subjects in identification of common mental health problems of primary school children.
 6. To know the relationship between pre-test and post-test knowledge and skills scores with the selected socio demographic variables of the subjects in identification of common mental health problems of primary school children.

I request you to kindly give your valuable suggestions and expert comment on the content of the tool. I also request you kindly put your signature on the certificate of validation stating you have validated the tool. Please suggest modifications wherever applicable.

Place : Bangalore

Date :

Yours faithfully

(Esther Shirley Daniel)

ENCLOSURES:

1. Blue print of the content of the tool
2. Tools:
 - 2.1 Self-Administered Structured Questionnaire.
 - 2.1.1. Demographic Performa (Part I)
 - 2.1.2 Self-administered Knowledge Test (Part II)
 - 2.1.3. Self-administered Skill Test (Part III)
3. Scoring key
4. Criteria of content validity
5. Content validity certificate

Forwarded

Dr. Nagarajaiah

Assoc. professor,

Department of Nursing, NIMHANS,
BANGALORE.

**SELF ADMINISTERED KNOWLEDGE QUESTIONS ON COMMON MENTAL HEALTH
PROBLEM IN SCHOOL CHILDREN
BLUE PRINT**

SL. NO.	CONTENT	ITEM	TOTAL ITEM	PERCENTAG E
I.	Demographic variables	14	14	00.00
II.	Assessment of Knowledge on causes, etiology and prevention of:			
1.	Emotional Disorder	1-10	10	16.6
2.	Conduct Disorder	11-20	10	16.6
3.	Hyper kinetic Disorder	21-30	10	16.6
4.	Developmental Disorder	31-40	10	16.6
5.	Eating Disorder	41-50	10	16.6
6.	Habit Disorder	51-60	10	16.6
	TOTAL	60	60	100
III.	Assessment of skill			
	Rutters scale			
	A: Academic component	1-9	09	25.72
	B: Behavior component	1-26	26	74.28
	TOTAL	35	35	100

**Self-Administered Knowledge and skill assessment Questionnaire on Common
Mental Health Problems in School Children**

STRUCTURED QUESTIONNAIRE

DEMOGRAPHIC PERFORMA

PART- I

INSTRUCTIONS: Please read carefully and tick [☐] the appropriate box.

1. Code No -----

2. Age (years) -----

3. Marital Status: Single ☐ Married ☐ Marriage Duration -----

4. Gender:

a. Male

b. Female

☐☐

5. Religion:

a. Hinduism

b. Christianity

c. Islam

d. Any other (Specify): _____

☐☐☐

6. Type of Family

a. Nuclear

b. Joint

c. Extended

☐☐☐

7. No of Dependent family members: _____

8. Education Level

a. SSLC

b. PUC

c. TCH

d. B.Ed

e. Graduate & above

f. Any other [Specify]: _____

☐☐☐☐☐

9. Family Income per month: Rs_____

10. Were you aware of common mental health problems of school children before your teachers training programme?

a. Fully

b. Partially

c. Not at all

11. Did you have a course curriculum on common mental health problems in school children in your teachers training programme?

Yes

No

12. Have you have attended any in-service programme on common mental health problems in school children and how to recognize them in your tenure as a teacher?

a. Yes

b. No

13. Source of Information on common mental health problems in school children:

a. Radio

b. Television

c. News Paper/ Books/ Magazine/ Journals

d. Health Professionals

e. Relatives / Family members

f. Friends/ Neighbors

14. Number of years of teaching:

a. year

b. 2-3 years

c. 4-5 years

d. 6 years and above [Specify years]: _____

**Self-Administered Knowledge Questionnaire On Common Mental Health Problems
In School Children**

PART II

Multiple Choice Questions:

Sample No: _____

Evaluation: PRE/POST

Note: Kindly answer all the questions given below. Given below are some questions to know your knowledge about mental health. Read slowly and answer, as you understand it. Choose only one most appropriate response by the **shading the appropriate circle.** If you cannot understand any question do not hesitate to ask. The training programme can be improved only if we understand how much you know about common mental health problems in school children.

EMOTIONAL DISORDER

1] Few months after moving to a new neighborhood, a 8 year old girl refuses to go the bathroom or go to sleep in her own bed alone. She seems anxious and tells you that she is scared that her mother will die. In such a situation the child may suffer from an illness called:

- (a) Separation anxiety disorder. ☐
- (b) Phobic anxiety disorder. ☐
- (c) Social anxiety disorder. ☐
- (d) Sibling rivalry. ☐

2] The emotional disorders in children are *except*:

- (a) Separation anxiety disorder. ☐
- (b) Phobic anxiety disorder. ☐
- (c) Sibling rivalry. ☐
- (d) Mental retardation. ☐

3] Separation anxiety disorder is more common in:

- (a) Boys. ☐
- (b) Girls. ☐
- (c) Equal in Both. ☐
- (d) Do not know. ☐

- 4] The temperament prone for Separation Anxiety Disorder is:
- (a) Unstable mood. ☐
 - (b) Optimistic. ☐
 - (c) Anxious. ☐
 - (d) Pessimistic. ☐
- 5] Persistent irrational fear to a specific situation or object is called:
- (a) Fear of confined place ☐
 - (b) Specific (or) social phobia. ☐
 - (c) Fear of high place ☐
 - (d) Fear of open place ☐
- 6] Irrational fearful attitude towards school is known as:
- (a) Specific (or) school phobia. ☐
 - (b) School phobia. ☐
 - (c) Social phobia. ☐
 - (d) Hydro phobia. ☐
- 7] Persistent jealousy on arrival of younger sibling is known as:
- (a) Gang feeling. ☐
 - (b) Jealousy. ☐
 - (c) Sibling rivalry. ☐
 - (d) None of the above. ☐
- 8] Most important intervention in treatment of sibling rivalry is:
- (a) Rewards ☐
 - (b) Preparing the child for the new arrival. ☐
 - (c) Play Therapy. ☐
 - (e) None of the above. ☐

- 9] Emotional disorder having high remission rate is:
- (a) Separation anxiety disorder. ☐
 - (b) Specific phobia. ☐
 - (c) Sibling rivalry. ☐
 - (d) School phobia. ☐
- 10] School phobia usually occurs at:
- (a) 7-8 Years. ☐
 - (b) 4-5 Years & in early adolescence. ☐
 - (c) 6-10 Years. ☐
 - (d) Early adolescence. ☐

CONDUCT DISORDER

- 1] A 9 Years old boy gets into trouble at school because he starts to steal lunch money from other students and starts fighting causing injury to the other students. In such a situation the child may suffer from an illness called:
- (a) Conduct disorder. ☐
 - (b) Attention deficit hyperactive disorder. ☐
 - (c) Mental retardation. ☐
 - (d) Emotional disorder. ☐
- 2] Conduct disorder is characterized by, except:
- (a) Runs away from home. ☐
 - (b) Does not violate the rights of others. ☐
 - (c) Truancy from school. ☐
 - (d) Frequent outbursts of temper. ☐
- 3] Conduct disorder is usually seen before:
- (a) 5 Years of age. ☐
 - (b) 10 Years of age. ☐
 - (c) 15 Years of age. ☐
 - (d) 18 Years of age (or) at puberty. ☐

- 4] Conduct disorder is common in:
- (a) Males. ☐
 - (b) Females. ☐
 - (c) Equal in both. ☐
 - (d) Do not know. ☐
- 5] The factor mainly responsible for cause conduct disorder is:
- (a) Biological. ☐
 - (b) Social. ☐
 - (c) Cultural. ☐
 - (d) Parental and psychological. ☐
- 6] The conduct disorder may be classified into, *except*:
- (a) Unsocialized. ☐
 - (b) Socialized. ☐
 - (c) Oppositional defiant disorder. ☐
 - (d) Personality disorders. ☐
- 7] Technique used carefully in treatment of conduct disorder is:
- (a) Physical distance & touch control. ☐
 - (b) Use of humor. ☐
 - (c) Clarification. ☐
 - (d) Threats and punishments. ☐
- 8] Conduct disorder prior to 10 years of age is:
- (a) Childhood onset type. ☐
 - (b) Adolescent onset type. ☐
 - (c) Unspecified type. ☐
 - (d) None of the above. ☐

- 9] The complications of conduct disorder are, *except*:
- (a) Drug abuse & alcohol. ☐
 - (b) Wanted pregnancies. ☐
 - (c) Criminal record. ☐
 - (d) Suicidal & homicidal behavior. ☐
- 10] Conduct disorder is diagnosed if the symptoms persist beyond:
- (a) 10 months. ☐
 - (b) 12 months. ☐
 - (c) 24 months. ☐
 - (d) 36 months. ☐

HYPERKINETIC DISORDER

- 1] A 9 years old boy gets into trouble at school because he constantly interrupts the teacher and disturbs the other students by talking and running around. In such a situation the child may suffer from an illness called:
- (a) Conduct disorder. ☐
 - (b) Learning disorder. ☐
 - (c) Language disorder. ☐
 - (d) Attention Deficit Hyperkinetic Disorder. ☐
- 2] Attention Deficit Hyperkinetic Disorder is characterized by, *except*:
- (a) Being restless. ☐
 - (b) Being chattering and interrupting people. ☐
 - (c) Being easily distracted. ☐
 - (d) Complete the task. ☐
- 3] Attention Deficit Hyperkinetic Disorders is common among:
- (a) Boys. ☐
 - (b) Girls. ☐
 - (c) Both. ☐
 - (d) Do not know. ☐

- 4] Attention Deficit Hyperkinetic Disorder is diagnosed with a past history of:
- (a) Hyper kinetic type. ☐
 - (b) Impulsivity type. ☐
 - (c) Residual type. ☐
 - (d) None of the above. ☐
- 5] Impulsivity is mainly characterized by:
- (a) Fail to complete the task. ☐
 - (b) Does not seem to listen. ☐
 - (c) Act before thinking. ☐
 - (d) Often loose things. ☐
- 6] Interventions used in treatment of Attention Deficit Hyperkinetic Disorder are *except*:
- (a) Behavior therapy. ☐
 - (b) Psychotherapy. ☐
 - (c) Environmental Engineering. ☐
 - (d) Increasing sugar intake. ☐
- 7] Common psychological factor contributing to the Attention Deficit Hyperkinetic Disorder is:
- (a) Chaotic environment. ☐
 - (b) Parental history of Attention Deficit Hyperkinetic Disorder. ☐
 - (c) Child's temperament. ☐
 - (d) Family history of alcohol. ☐
- 8] The onset of Attention Deficit Hyperkinetic Disorder is usually before:
- (a) 2 years of age ☐
 - (b) 3 years of age ☐
 - (c) 5 years of age ☐
 - (d) 7 years of age ☐

- 9] Attention Deficit Hyperkinetic Disorder is also named as:
- (a) September infection. ☐
 - (b) Winter infection. ☐
 - (c) Summer infection. ☐
 - (d) None of the above. ☐
- 10] One of the following may cause Attention Deficit Hyperkinetic Disorder:
- (a) Vegetables. ☐
 - (b) Fruits. ☐
 - (c) Preservatives & sugar. ☐
 - (d) Oily content. ☐

DEVELOPMENTAL DISORDER

- 1] Mental Retardation is reduced:
- (a) Height. ☐
 - (b) Weight. ☐
 - (c) Intelligence. ☐
 - (d) Movement. ☐
- 2] Fetal infection which can cause mental retardation is:
- (a) Rubella. ☐
 - (b) HIV. ☐
 - (c) Syphilis. ☐
 - (d) All the above. ☐
- 3] During pregnancy women:
- (a) Can drink alcohol. ☐
 - (b) Should not drink alcohol. ☐
 - (c) Occasionally drink alcohol. ☐
 - (d) Can drink alcohol with sufficient food. ☐

- 4] Mental Retardation is caused by the deficiency of:
- (a) Potassium. ☐
 - (b) Calcium. ☐
 - (c) Iodine. ☐
 - (d) Magnesium. ☐
- 5] Mental Retardation is classified into following categories:
- (a) Mild, moderate, severe & profound. ☐
 - (b) Mild, moderate and severe. ☐
 - (c) None of the above. ☐
 - (d) Do not know. ☐
- 6] Profound Mental Retardation diagnosed when intelligent quotient is below:
- (a) 20. ☐
 - (b) 40. ☐
 - (c) 70. ☐
 - (d) 90. ☐
- 7] The child with moderate Mental Retardation can be:
- (a) Educated. ☐
 - (b) Trained. ☐
 - (c) All the above. ☐
 - (d) None of the above. ☐
- 8] Developmental reading disorder is:
- (a) Impairment in development of reading skill. ☐
 - (b) Impairment in development of arithmetic skill. ☐
 - (c) Impairment in development of spelling skill. ☐
 - (d) All the above. ☐
- 9] Developmental coordination disorder is:
- (a) Lack in scholastic performance. ☐
 - (b) Defect in speech and language. ☐
 - (c) Lack in fine (or) gross motor task performance. ☐
 - (d) None of the above. ☐

- 10] National Trust Act came into force in the year:
- (a) 1999. ☐
 - (b) 1972. ☐
 - (c) 1947. ☐
 - (d) 2000. ☐

EATING DISORDER

- 1] Eating disorder in children includes *except*:
- (a) Pica. ☐
 - (b) Rumination disorder. ☐
 - (c) Failure to thrive. ☐
 - (d) Anorexia nervosa. ☐
- 2] Pica is characterized by:
- (a) Persistent eating of non-nutritious substance. ☐
 - (b) Binge eating with vomiting. ☐
 - (c) Binge eating without vomiting. ☐
 - (d) Persistent failure to eat adequately. ☐
- 3] Pica is caused by following factors *except*:
- (a) Nutritional deficiency. ☐
 - (b) Neurological conditions. ☐
 - (c) Mental retardation. ☐
 - (d) Happy parent child relationship. ☐
- 4] Rumination disorder usually occurs between:
- (a) 3 to 12 years of age. ☐
 - (b) 3 to 12 months of age. ☐
 - (c) 3 to 10 years of age. ☐
 - (d) 3 to 10 months of age. ☐

- 5] Rumination disorder is characterized by:
- (a) Persistent eating of non-nutritive substance. ☐
 - (b) Repeated regurgitation and rechewing of food. ☐
 - (c) None of the food above. ☐
 - (d) All of the above. ☐
- 6] Failure to thrive is characterized by:
- (a) Persistent eating of non-nutritive substance. ☐
 - (b) Persistent failure to eat adequately. ☐
 - (c) None of the above. ☐
 - (d) All of the above. ☐
- 7] Failure to thrive is diagnosed when a child fails to maintain:
- (a) Weight. ☐
 - (b) Height. ☐
 - (c) Height & weight. ☐
 - (d) Correlation. ☐
- 8] Failure to thrive usually occurs before:
- (a) One year of age. ☐
 - (b) Three years of age. ☐
 - (c) Five years of age. ☐
 - (d) Six years of age. ☐
- 9] Pica is usually seen in:
- (a) Infancy. ☐
 - (b) Preschool children. ☐
 - (c) School going children. ☐
 - (d) None of the above. ☐
- 10] One of the major causes for pica is:
- (a) Deprivation of oral needs. ☐
 - (b) Mental retardation. ☐
 - (c) Cultural factors. ☐
 - (d) Neurological disorder. ☐

HABIT DISORDER

- 1] Habit disorder is:
- (a) Abnormality in mannerism. ☐
 - (b) Abnormality in movement. ☐
 - (c) Abnormality in central nervous system. ☐
 - (d) None of the above. ☐
- 2] Habit disorders include the following *except*:
- (a) Thumb sucking. ☐
 - (b) Nail biting. ☐
 - (c) Trechotillo mania. ☐
 - (d) Attention deficit disorder. ☐
- 3] Habit of putting thumb into mouth is:
- (a) Nail biting. ☐
 - (b) Nail sucking. ☐
 - (c) Thumb sucking. ☐
 - (d) All the above. ☐
- 4] Thumb sucking is most common in:
- (a) Boys. ☐
 - (b) Girls. ☐
 - (c) Equal in both. ☐
 - (d) Do not know. ☐
- 5] Least used intervention in thumb sucking is:
- (a) Play therapy. ☐
 - (b) Mechanical restrain. ☐
 - (c) Placing of special devices in mouth. ☐
 - (d) Behavior therapy. ☐

- 6] Nail biting is usually diagnosed after:
- (a) 2 years of age. ☐
 - (b) 3 years of age. ☐
 - (c) 4 years of age. ☐
 - (d) 5 years of age. ☐
- 7] Nail biting is usually common among:
- (a) Boys. ☐
 - (b) Girls. ☐
 - (c) Equal in both. ☐
 - (d) Do not know. ☐
- 8] The irresistible urge to pull one's hair is:
- (a) Trichotillo mania ☐
 - (b) Kleptomania ☐
 - (c) Ablutomania ☐
 - (d) Hypo mania ☐
- 9] Nail biting may also be an expression of:
- (a) Excitement. ☐
 - (b) Aggression. ☐
 - (c) Both. ☐
 - (d) None. ☐
- 10] The relatively uncommon habit disorder is:
- (a) Thumb sucking ☐
 - (b) Nail biting. ☐
 - (c) Picking of the nose. ☐
 - (d) Trichotillo mania. ☐

PART III
CHILDREN'S BEHAVIOUR QUESTIONNAIRE
[RUTTERS' SCALE]

PERFORMA B

Children's Behavior Questionnaire for completion by Teachers.

Child Scale B:

To be completed by Teachers.

Below are a series of descriptions of behavior often shown by children. After each statement there are three columns: 'Doesn't Apply', 'Applies Somewhat', 'Certainly Applies'. If the child shows the behaviors described by the statement, but to a lesser degree, or less often, place the cross [X] in the box under 'Applies Somewhat'. If as far as you are aware, the child DOES NOT SHOW the behavior, place a cross [X] in the box under 'Doesn't Apply'. Please put ONE cross against EACH statement.

Thank you.

SL. NO	BEHAVIOUR	Doesn't Apply	Applies Somewhat	Certainly Applies
1.	Very restless, often running about or jumping up and down. Hardly ever still.			
2.	Truants from school, does not attend.			
3.	Squirmy, fidgety child.			
4.	Often destroys own or others' belongings.			
5.	Frequently fights with other children.			
6.	Not much liked by other children.			
7.	Often worried, worries about any things.			
8.	Likes to do things on his own [rather solitary]			
9.	Irritable. Is quick to 'Fly off the handle'. [Gets angry quickly].			
10.	Often appears miserable, unhappy, tearful or distressed.			
11.	Have twitches, mannerisms or tics of the face or body.			
12.	Frequently sucks thumb or fingers.			
13.	Frequently bites nails or fingers.			
14.	Tends to be absent from school for trivial reasons.			

SL. NO	BEHAVIOUR	Doesn't Apply	Applies Somewhat	Certainly Applies
15.	Is often disobedient.			
16.	Has poor concentration or short attention span.			
17.	Tends to be tearful or afraid of new things or new situations.			
18.	Fussy or over particular child.			
19.	Often tells lies.			
20.	Has stolen things on one or more occasions.			
21.	Has wet or soiled self at school this year.			
22.	Often complains of pains and aches.			
23.	Has had tears on arrival at school or has refused to come into the school building, this year.			
24.	Has a stutter or stammer.			
25.	Has other speech difficulty.			
26.	Bullies other children.			

Are there any other problems of behavior?

Signature: Mr/ Mrs/ Miss: _____

How well do you know this child?

Very well/ Moderately well/ Not very well.

APPENDIX 5

SELF-ADMINISTERED KNOWLEDGE & SKILL QUESTIONNAIRES ON COMMON MENTAL HEALTH PROBLEMS IN SCHOOL CHILDREN

SCORING KEY

KNOWLEDGE QUESTIONNAIRE

Emotional disorder: disorder:

QUESTION NO	KEY ANSWER	QUESTION NO	KEY ANSWER	QUESTION NO	KEY ANSWER
1.	A	1.	A	1.	D
2.	D	2.	B	2.	D
3.	B	3.	D	3.	A
4.	C	4.	A	4.	C
5.	B	5.	D	5.	C
6.	B	6.	D	6.	D
7.	C	7.	D	7.	A
8.	B	8.	D	8.	D
9.	A	9.	B	9.	B
10.	B	10.	B	10.	C

Conduct disorder:

Hyper kinetic

Developmental disorder:

Eating disorder:

Habit disorder:

QUESTION NO	KEY ANSWER	QUESTION NO	KEY ANSWER	QUESTION NO	KEY ANSWER
1.	C	1.	D	1.	A
2.	D	2.	A	2.	D
3.	B	3.	D	3.	C
4.	C	4.	B	4.	A
5.	A	5.	B	5.	B
6.	A	6.	B	6.	B
7.	B	7.	A	7.	B
8.	A	8.	D	8.	A
9.	C	9.	B	9.	C
10.	A	10.	A	10.	D

APPENDIX 6

EDUCATIONAL MODULES

MODULE I: STRUCTURED TEACHING

MODULE II: SELF INSTRUCTIONAL MODULE

STRUCTURED TEACHING PROGRAMME

SESSION – I

TOPIC: 'Identification of Common Mental Health Problems among school children'.

- Emotional Disorder
- Conduct Disorder
- Hyper kinetic Disorder

GROUP: Primary School Teachers

PLACE: Government primary Schools, Anekal Taluq.

TIME: (Duration) 60 Minutes.

MEDIUM OF INSTRUCTION: Kannada

METHOD OF TEACHING: Lecture-cum-discussion.

TEACHING AID: Charts, flannel-o-graph, models and slides.

GENERAL OBJECTIVES: Participants,

1. Understand the causes, detection and prevention of common mental health problems among primary school children.
2. Apply the knowledge in the identification of the above conditions.

SPECIFIC OBJECTIVES: Participant will be able to:

1. Describe the main types of mental health problems.
2. State the causes of emotional disorders.
3. State the etiology of emotional disorders.
4. State the method of identification of emotional disorders.
5. Describe the role of a teacher in the prevention of emotional disorders.
6. State the causes of conduct disorders.
7. Enumerate the etiology of conduct disorders.
8. State the method of identification of conduct disorders.
9. Describe the role of a teacher in the prevention of conduct disorders.
10. State the causes of hyper kinetic disorders.
11. Enumerate the etiology of hyper kinetic disorders.
12. State the method of identification of hyper kinetic disorders.
13. Describe the role of a teacher in the prevention of hyper kinetic disorders.

OM	OBJECTIVE	CONTENT	TEACHING / LEARNING ACTIVITY	A.V.AIDS	EVALUATION
00:00 Mts			<p>INTRODUCTION:</p> <p>Children form a vital and vulnerable segment of the population. The socio economic progress of the nation depends upon their care and development. The growth of the child physically, socially, emotionally is rapid during this stage. Therefore there is need for health supervision. It is important to implement and assess health programme in this group. Children at this stage are very receptive to new knowledge.</p> <p>The health of the school child is the responsibility of parents, teachers, health administrators and the community. The success or efficiency of school health services depends largely on effective coordination between the participating agencies.</p> <p>The teacher plays a significant role in the promotion of the health of the children under his/her care. Teachers spend most of the school hours with children and are familiar with them. They can detect at the earliest the signs and symptoms of common mental health problems</p>		

			<p>in the classroom setting. It is expected that out of 51 lakh children (6-11 years of age) approximately 5 lakh children suffer from mental health problems in Karnataka (source EMIS 2004 – 2005).</p> <p>The teacher who is a member of the school health team has a greater role to play in the effective implementation of the programme. Hence the teacher should equip herself with necessary knowledge of common mental health problems of school children.</p>		
00:02 Mts.			<p>ANNOUNCEMENT OF THE TOPIC: Causes, detection and prevention of common mental health problems among primary school children.</p> <p>Session I:</p> <ul style="list-style-type: none"> ➤ Emotional Disorder ➤ Conduct Disorder ➤ Hyper kinetic Disorder <p>Session II:</p> <ul style="list-style-type: none"> ➤ Developmental disorder. ➤ Eating disorder. ➤ Habit disorder. 		

	<p>State the causes of phobic anxiety disorders</p>	<ul style="list-style-type: none"> ○ Separation anxiety disorder ○ Phobic anxiety disorder ○ Sibling rivalry <p>Causes of Separation anxiety disorder</p> <p>Genetic factors: SAD cluster in families but genetic transmission is unclear. Some data linked; affected children with parents have history of disorder.</p> <p>Temperament: anxiety prone or vulnerability temperament.</p> <p>Environment influence: Stressful life events</p> <p>Family influence: Overall attachment to the:</p> <ul style="list-style-type: none"> • Mother • Parental conflict • Close knit families • Over protectiveness 	<p>Teacher questions: Q1: What are the causes of separation anxiety disorder?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>		<p>What are the causes of separation anxiety disorder?</p>
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		<p>Etiological factors of phobic anxiety disorders: It includes Specific phobia School phobia Specific phobias</p> <ul style="list-style-type: none"> • Genetic susceptibility • Family dynamics • Psychological factors • Conditioning • Modeling • Temperament <p>School phobias:</p> <ul style="list-style-type: none"> ➤ Separation anxiety suffered by the child ➤ Separation anxiety suffered by the parent ➤ Maligning [child has not completed a homework assignment] ➤ A legitimate cause of fear at school [gangs, cruel teacher] ➤ Homosexual panic in older adult • Birth of sibling • Excessive anxiety or depression • After punishment or rejection from care takers 	<p>Teacher questions: Q1: What are the causes of phobic anxiety disorders?</p> <p>Teacher appreciates the responses and supplements the answers.</p>	<p>Flannel-o-graph depicting pictures of children with phobic anxiety disorders.</p> <p>Slide # 3: Phobic anxiety disorders</p>	<p>What are the causes of phobic anxiety disorders?</p> <p>What are the causes of school phobias?</p>
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00:13 Mts.	State the pearls and perils for emotional disorder	<p>Pearls and Perils of separation anxiety disorder</p> <ul style="list-style-type: none"> • Chronic and fluctuating cause • Consistent worry about being separated from primary attachment figures • Normal phenomenon at ages 18 to 36 months • Frequent somatic symptoms are common • Often starts after a precipitating events [accident, illness or loss of a peer or parent] • Starting kindergarten, junior high school, puberty are the stages of vulnerability • School avoidance is present in three quarters of children with SAD, however home schooling is contraindicated • SAD has high remission rates, but children are at risk for other anxiety and mood disorders. <p>Pearls and Perils of specific phobia:</p> <p>It is characterized by excessive and unreasonable fear response that persistently occurs when a child is exposed or anticipates exposure</p>	<p>Teacher questions: Q1: What are the pearls and perils of separation anxiety disorder?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	Slide # 4: pearls and perils of separation anxiety disorder.	What are the pearls and perils of separation anxiety disorder?
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		<p>to a specific object or situation.(eg. phobic object includes animals, insects, blood, heights, or enclosed spaces.)</p> <p>Prevalence rate of specific phobia ranges from 2.4% to 3.3 % social phobia it is estimated to be from 1-2%. The rate appears higher in girls than in boys for both specific and social phobias. Peak incidence of social phobias appears to be in early to mid-adolescence.</p> <p>Pearls and Perils of school phobias:</p> <ul style="list-style-type: none"> ➤ a fearful attitude towards avoidance of school ➤ most commonly occur at age 4 – 5 years and in early adolescent. <p>Pearls and Perils of Sibling rivalry:</p> <ul style="list-style-type: none"> ➤ Most children show some degree of emotional disturbance on arrival of a younger sibling. ➤ This is usually mild but in some case a persistent rivalry or jealousy may set in. they may 	<p>Teacher questions: Q1: What are the pearls and perils of specific phobia?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation</p> <p>Teacher questions: Q1: What are the pearls and perils of school phobias?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation</p> <p>Teacher questions: Q1: What are the pearls and perils of sibling rivalry?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation</p>	<p>LCD showing pictures of children with phobic anxiety disorder.</p> <p>Slide # 5: School Phobias</p> <p>LCD showing pictures of sibling rivalry</p>	<p>What are the pearls and perils of specific phobia?</p> <p>What are the pearls and perils of school phobias?</p> <p>What are the pearls and perils of sibling rivalry?</p>
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		<p>occur marked competition with sibling for the attention and affection of parents associated with unusual degree of negative feeling for the younger sibling.</p> <ul style="list-style-type: none"> ➤ In mild cases there is just reluctance to share and lack of regard for the younger sibling. ➤ When severe the child may show overt hostility and may even physically injure the younger sibling. 			
00.15Mts.	State the method of identification of emotional disorders.	<p>Method of identification of emotional disorders:</p> <p>History taking:</p> <ul style="list-style-type: none"> ➤ Teacher should question the parents on whether the child has emotional problems. <p>Observation :</p> <p>Each child should be observed carefully.</p> <p>1. Variable features of separation anxiety disorder</p> <ul style="list-style-type: none"> • Fear of sleeping alone • Inability to go to school or poor attendance • Worrying that harm may befall parents during separations • Preceded by environmental stressors or at times of transitions • Somatic complaints upon 	<p>Teacher Questions</p> <p>Q1: Outline the method of identification of separation anxiety disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>		How does one identify the separation anxiety disorders in children?

		<p>separation</p> <ul style="list-style-type: none"> • Specific phobias • Depressed mood • Night mares • Temper tantrums, crying and screaming. • <p>Variable features of phobic anxiety disorder</p> <ul style="list-style-type: none"> • Increased anxiety upon real or imagined exposure to phobic object or situation • Avoidance of phobic object or social situation which leads to functional impairment • Anxiety occurs with peers as well as adults • Increased and excessive fear when exposed to specific object or environment • Excessive anxiety continued around social situation or when scrutinized. 	<p>Teacher Questions Q1: Outline the method of identification of phobic anxiety disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>		How does one identify the phobic anxiety disorders in children
00.20 Mts	Describe the role of a teacher in the prevention of emotional disorders.	<p>Role of a teacher in the prevention of emotional disorders:</p> <p>Give health education and advice on sound mental health principles to both parents and children.</p> <ul style="list-style-type: none"> • Preparing the child for the new Arrival with positive expectations • Child should made feel that he is not neglected due to new arrival 	<p>Teacher questions. Q1: What are the qualities of a healthy person?</p> <p>Participants respond.</p> <p>Teacher supplements the answer by suitable discussions</p>	LCD showing slides on sound mental health	<p>How can a teacher help in prevention of mental problems among school children?</p> <p>What is the role of a teacher in the prevention of emotional</p>

		<ul style="list-style-type: none"> • He / she should be given attention and should be involved in care of the younger sibling • Need for consistent and constructive support. 			disorders?
00.23 Mts.	State the clinical example for conduct disorders.	Clinical example for Conduct disorder <i>Typical patient:</i> A 9yrs old boy gets into trouble at school because he steals lunch money from other students and often fights causing injury to the other students		.	
00.25Mts.	Enumerate the etiology of conduct disorders.	Etiology of conduct disorders: No single factor can account for conduct disorder; rather many bio-psycho-social factors contribute to development of disorder. Parental factors: <ul style="list-style-type: none"> • Sever physical and verbal aggression • Chaotic home condition • Divorce with hostility, resentment and bitterness. • Parent psychopathology • Child abuse, parental rejection • Negligence [care by relatives & foster homes] 	Teacher questions. Q1: What are the etiologies of conduct disorders? Participants respond. Teacher supplements the answer by suitable discussions. Teacher acknowledges the responses and explains.	Slide # 6: Causes of conduct disorders Charts OHP Transparencies	What are the causes of conduct disorders in children

		<ul style="list-style-type: none"> • Socio-pathic alcohol dependence and substance abuse in the parents • Parents are scared by their own upbringing and tend to be abusive, negligent or engrossed in getting their own personal needs met. <p>Social-cultural factors:</p> <ul style="list-style-type: none"> • Socio-economic deprivations • Urban environment • Unemployed parents • Lack of supportive social network • Lack of positive participation in community <p>Psychological factors:</p> <ul style="list-style-type: none"> • Chaotic, negligent condition often express poor emotional modulation of emotion including anger, frustrations and sadness • Poor modeling of impulse control • Chronic lack of having their own needs <p>Other factors:</p> <ul style="list-style-type: none"> • Inconsistent management with harsh discipline • Early institutional living 			
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	State the pearls and perils for conduct disorder	<ul style="list-style-type: none"> • Frequent shifting of parental times • Large family size • Absent father • Parents with anti-social personality • Inadequate communication pattern • Marital conflict • Parental permissiveness <p>Pearls and Perils for conduct disorder</p> <ul style="list-style-type: none"> ○ Persistent antisocial behavior in children that significantly impair their ability to function in social academic or occupational areas ○ Persistent and significant pattern of conduct in which the basic rights of others are violated or rules of the society are not followed. ○ The diagnosis is only made when the conduct is far in excess of the routine mischief of children. ○ The onset occurs much before 18 years of age. Usually even before puberty. The disorder is much more [5 – 10 times] common in males. 	Teacher questions. Q1: What are the pearls and perils of conduct disorders? Participants respond. Teacher supplements the answer by suitable discussions. Teacher acknowledges the responses and explains		What are the pearls and perils of conduct disorders?
00.30 Mts.	Describe the role of a teacher in the	<p>Method of identification of conduct disorders:</p> <p>History taking: Teacher should</p>	Teacher Questions		

	<p>identification of conduct disorders.</p>	<p>question the parents on whether the child has conduct problems in the past 12 months, with at least one criterion present in the past 6 months</p> <p>Observation :</p> <p>Each child should be observed carefully for:</p> <ul style="list-style-type: none"> • Aggression to people and animals • Physical fights • Use of weapons • Forced sexual activity • Cruelty to people or animals • Destruction of property • Fire setting, rape and assault • Vandalism • Deliberate properties destruction • Deceitfulness and theft • Lying stealing and robbery • Shop lifting <p>Breaking into house, building or cars, cons others to avoid responsibility</p> <ul style="list-style-type: none"> • Serious violation of rules • Stay out overnight without parental consent • Runway from home overnight • Truancy from school • Lack of guilt • Low self-esteem [tough guy] • Poor frustration tolerance 	<p>Q1: Outline the role of a teacher in the method of identification of conduct disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>LCD showing slides on identification of conduct disorders.</p>	<p>How does one identify the conduct disorders in children?</p>
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00.35 Mts.	Describe the role of a teacher in the prevention of conduct disorders.	<ul style="list-style-type: none"> • Irritability • Frequent times out burst • Low level of academic achievements • Complication [drug abuse, uncared or unwanted pregnancies, syphilis, aids, criminal records, suicidal or homicidal behavior. <p>Techniques for managing/preventing disruptive behaviors:</p> <ul style="list-style-type: none"> ➤ Planned ignoring: Evaluate surface behavior and intervene when the intensity is becoming too great ➤ Use of signals or gestures: Use a word, gesture, or eye contact to remind the child to use self-control ➤ Physical distance and touch control: Move closer to the child for a calming effect, perhaps put an arm around the child. ➤ Increased involvement in the activity: redirect the child's attention to the activity and away from a distracting behavior by asking a question. ➤ Additional affection: Ignore the provocative content of the behavior and give the child 	<p>Teacher Questions Q1: Outline the role of a teacher in the prevention of conduct disorders in relation to preventing disruptive behavior.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher Questions Q1: Outline the role of a teacher in</p>	<p>LCD slides depicting preventing disruptive behavior.</p> <p>LCD slides depicting</p>	<p>What is the role of a teacher in the prevention of disruptive behavior?</p> <p>What is the role of a teacher in the</p>
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		<p>emotional support for the current problem.</p> <ul style="list-style-type: none"> ➤ Use of humor: Use well timed kidding as a diversion to help the child save face and relive feelings of guilt or fear. ➤ Direct appeals: Appeal to the child's developing self-control: Please not now. ➤ Extra assistance: Give early help to the child who "blows up" and is easily frustrated when trying to achieve a goal;; do not over use this technique. ➤ Clarification as intervention: help the child understand the situation and his or her own motivation for the behavior. ➤ Restructuring: Change the activity in ways that will decrease the stimulation or the frustration [e.g., shorten a story or change to a physical activity] ➤ Regrouping: Use total or partial changes in the group's composition to reduce conflict and contagious behaviors. ➤ Strategic removal: Remove a child who is disrupting or acting dangerously, but consider whether this gives the child too much status or makes the child a scapegoat. ➤ Physical restrain: Use 	<p>the prevention of conduct disorders by use of humor</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher Questions Q1: Outline the role of a teacher in the prevention of conduct disorders by use of physical restrain.</p>	<p>prevention of conduct disorders by use of humor</p> <p>LCD slides on use of restrains in prevention of conduct disorders.</p>	<p>prevention of conduct disorders?</p> <p>What is the role of a teacher in the prevention of conduct disorders by use of physical</p>
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		<p>treatment plan Provide a routine schedule of daily activities</p> <p><i>Improving coping skills and self-esteem:</i> Show acceptance of the person not necessarily behavior Encourage the client to keep a diary Teach and practice problem solving skills</p> <p><i>Promote social interaction:</i> Teach child appropriate social skill Role model and practice social skill Provide positive feedback for acceptable behavior</p> <p><i>Promote client and family education:</i> Teach social problems solving skills Encourage parents to seek treatment of their own problem Educate age appropriate activities and expectations Assist parents with direct and clear communication Educate discipline strategies Avoid rescuing the client.</p>	<p>Teacher Questions Q1: Outline the role of a teacher in the prevention of conduct disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>LCD slides on role of a teacher in prevention of conduct disorders.</p>	<p>What is the role of a teacher in the prevention of conduct disorders</p>
00.40 Mts	State the clinical example for	<p>Attention deficit hyper kinetic disorder</p> <p>Typical patient: A 9 year old boy</p>			

	attention deficit hyperkinetic disorder	<p>gets into trouble at school because he constantly interrupts the teacher and disturbs the other student by talking and running around Many children find it hard to sit in one place for a long time [especially those under the age of 5 years] as child grows older the ability to pay attention is one of the essential needs for their education and discipline. If a child cannot pay attention, then he will not follow what is being taught in the class room. He will become fidgety and restless, similarly, if the child is not paying attention to what his parents want him to do, he is likely to misbehave. Some children may become so restless that they may do dangerous things e.g. jumping from heights. In such situation the child may suffer from an illness called attention deficit hyper active disorder</p>			
00.45 Mts.	State the pearls and perils of ADHD	<p>Pearls and Perils of ADHD</p> <ul style="list-style-type: none"> • ADHD is an illness that is more common in boys. • Children with ADHD will: <ul style="list-style-type: none"> ➤ Be restless [being unable to sit in a chair through a full lesson] ➤ Being fidgety, chattering and 	<p>Teacher questions: Q1: What are the pearls and perils of Attention deficit disorder with hyperactivity?</p> <p>Participants respond.</p>	<p>Slide # 9: Attention deficit disorder with hyperactivity</p> <p>Flannel-o-graph depicting</p>	<p>What are the pearls and perils of Attention deficit disorder with hyperactivity?</p>

	<p>State the causes of hyper kinetic disorders.</p>	<p>interrupting people</p> <ul style="list-style-type: none"> ➤ Have difficulty in concentrating or paying attention [being unable to complete homework] ➤ Be easily distracted and do not finish what they have stated ➤ Unable to wait for their turn in games or in talking to others ➤ Extremely demanding of attention ➤ Have problems with learning and studies ➤ Be disorganised and untidy <p>Method of identification of hyper kinetic disorders:</p> <p>History taking:</p> <ul style="list-style-type: none"> ➤ Teacher should question the parents on whether the child has hyper kinetic disorder problems. <p>Observation :</p> <p>Each child should be observed carefully.</p> <p>Causes of hyper kinetic disorders:</p> <ul style="list-style-type: none"> • Causes are unknown • Suggested contributory factors are • Per natal toxic exposure • Pre natal mechanical injury 	<p>Teacher acknowledges the correct responses and supplements with explanation.</p> <p>Teacher questions: Q1: What are the causes of hyper kinetic disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	<p>pictures of children.</p>	<p>What are the causes of hyper kinetic disorders?</p>
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		<p>to fetal nervous system</p> <ul style="list-style-type: none"> • Food additives • Colorings • Preservatives and sugar <p>Genetic factors:</p> <ul style="list-style-type: none"> • Greater concordance is monozygotic than in dizygotic twins • Siblings of hyperactive children have about twice the risk of having the disorder than general population • Biological parents of children with the disorder have a higher risk for ADHD than adoptive parents. <p>Development factors: September is the peak months both ADHD children with or without learning disorders [winter infection] Some children affected by ADHD suffered subtle damage to the CNS and brain development during their foetal prenatal period. The brain damage may potentially associate with circulatory, toxic, metabolic, mechanical or physical insult to the brains during early infancy caused by infection inflammation and trauma</p>	<p>Teacher questions: Q1: What are the causes of hyper kinetic disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	<p>Slide # 7: Environmental factors that causes hyper kinetic disorders.</p>	<p>What are the environmental factors that cause</p>
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		<p>Bio-chemical factors or neuro chemical factors: Deficit of catocholmeres dopamine and nor epinephrine is the one activity attributed to ADHD</p> <p>Prenatal, inter natal and post natal factors:</p> <ul style="list-style-type: none"> • Smoking during pregnancy • Intestinal exposure to toxic substances including alcohol [fetal alcohol syndrome] • Pre maturity • Sign of fetal distress • Precipitated or prolonged Labour • Low Apgar scores • Cerebral palsy • CNS abnormalities due to trauma, infections or other hemoglobin disorders <p>Environmental factors:</p> <ul style="list-style-type: none"> • Elevated blood levels of lead have adverse effect on cognitive behavior development in children • Diet factors [Food dyes, additives artificial flavoring and preservatives] and sugar <p>Psychological factors:</p>	<p>Teacher questions: Q1: What are the environmental factors that cause hyper kinetic disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	<p>Slide # 8: Psychological factors that causes hyper kinetic disorders.</p>	<p>hyper kinetic disorders?</p>
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		<ul style="list-style-type: none"> • Disorganized or chaotic environment and disruption in bonding during the first 3 years of life may predispose to ADHD [prolonged maternal deprivation] • Family history of alcoholism, hysterical and socio-pathic behavior, • Parental history of hyperactivity • Developmental learning disorder • Child's temperament • Disruption in the family equilibrium 			
00.45 Mts.	State the pearls and perils of ADHD	Pearls and Perils of ADHD <ul style="list-style-type: none"> • ADHD is an illness that is more common in boys. • Children with ADHD will: <ul style="list-style-type: none"> ➤ Be restless [being unable to sit in a chair through a full lesson] ➤ Being fidgety, chattering and interrupting people ➤ Have difficulty in concentrating or paying attention [being unable to complete homework] ➤ Be easily distracted and do not finish what they have stated ➤ Unable to wait for their turn in games or in talking to others 	<p>Teacher questions: Q1: What are the pearls and perils of Attention deficit disorder with hyperactivity?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	Slide # 9: Attention deficit disorder with hyperactivity	What are the pearls and perils of Attention deficit disorder with hyperactivity?

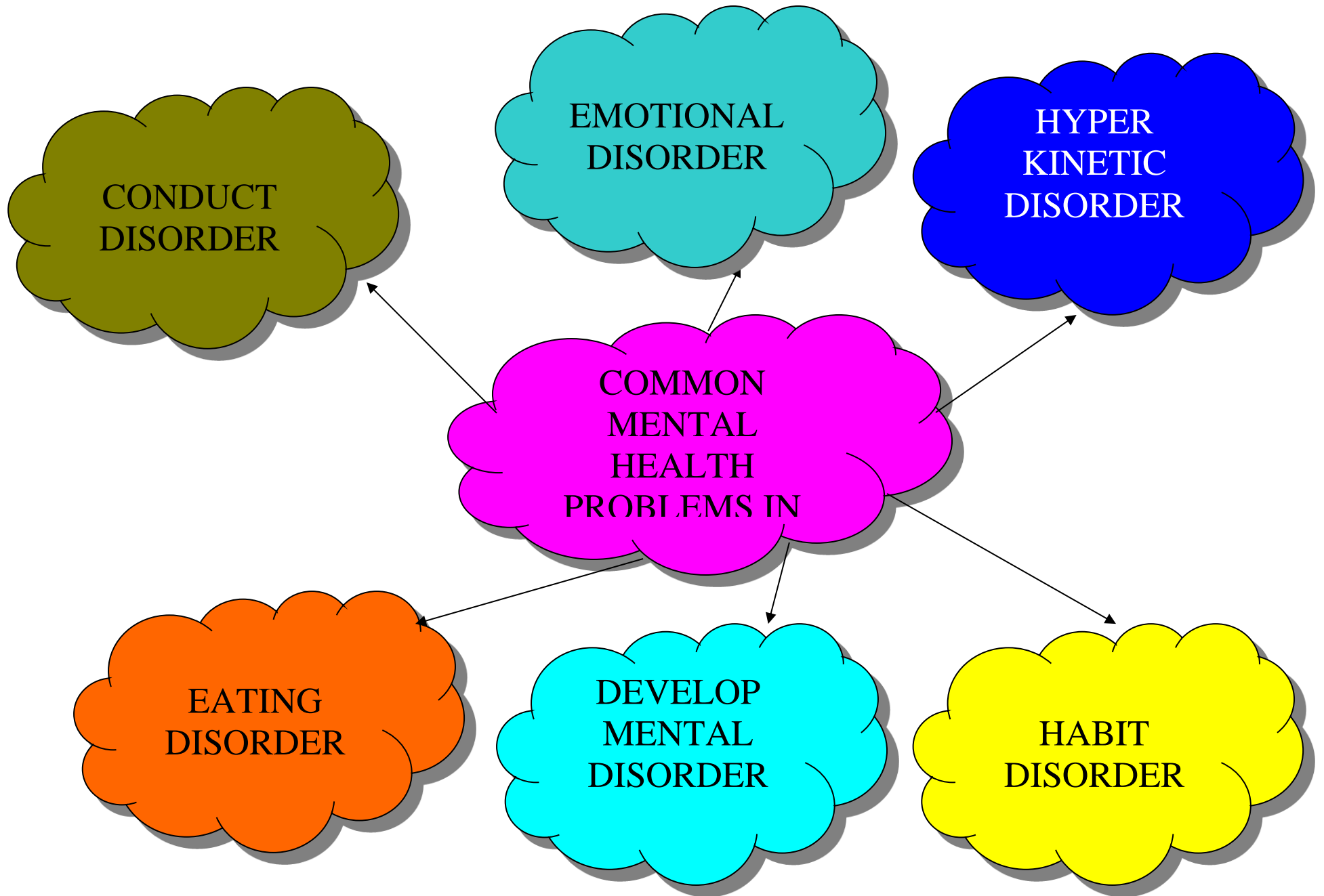
		<p>➤ Extremely demanding of attention</p> <p>➤ Have problems with learning and studies</p> <p>➤ Be disorganized and untidy</p> <p>Method of identification of hyper kinetic disorders:</p> <p>History taking:</p> <p>➤ Teacher should question the parents on whether the child has hyper kinetic disorder problems.</p> <p>Observation :</p> <p>Each child should be observed carefully.</p> <p>According to the type</p> <p>I Attention deficit disorder with hyperactivity: [Hyper kinetic disorder]</p> <p>a. A poor attention span with distractibility</p> <p>fails to finish the things started i.e.</p> <p>Shift from one uncompleted activity to another</p> <ul style="list-style-type: none"> • Does not seem to listen • Easily distracted by external 	<p>Teacher Questions</p> <p>Q1: Outline the method of identification of hyper kinetic disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher questions:</p> <p>Q1: What are the pearls and perils of Attention deficit disorder with hyperactivity?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with</p>	<p>LCD slides</p> <p>Slide # 10: Hyperactivity</p> <p>Slide # 11: Impulsivity</p>	<p>What are the methods of identification of hyper kinetic disorders?</p>
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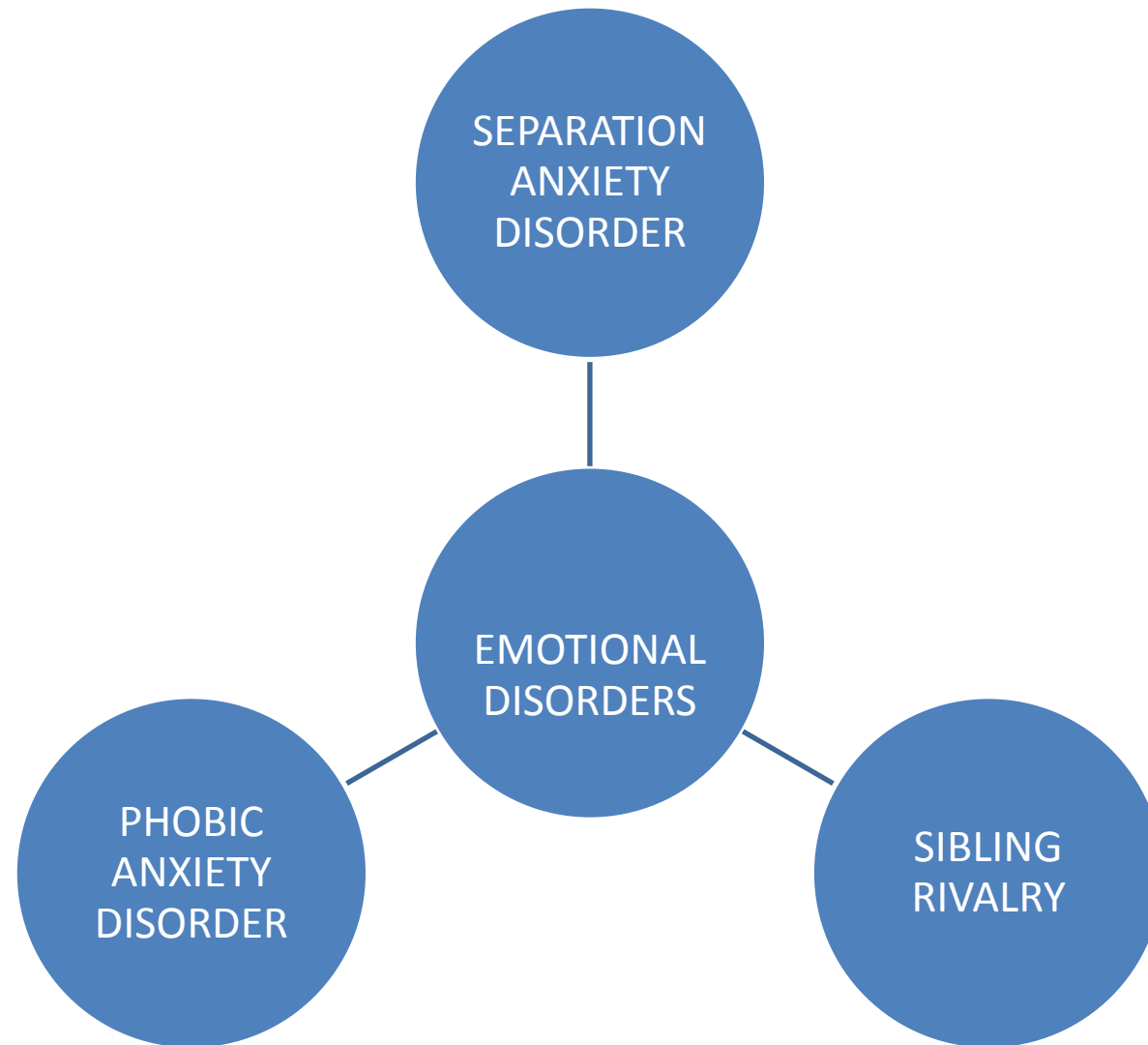
	prevention of hyper kinetic disorders.	<p><i>Client / family education and support:</i></p> <ul style="list-style-type: none"> • Listen to parents feeling and frustrations • Include parents in planning and providing care • Refer parents to support group • Focus on child's strength as well as problems • Inform parents that child is eligible for special school services • Assist parents to identify behavioral approaches to be used at home. • Help parents to achieve a balance of praising and correcting child's behavior • Emphasis this need for structure and consistency in child daily routine and behavioral expectations • Diet : reducing the child's sugar intake reduces the hyperactivity • Behavior modification program • Psychotherapy used as adjacent to a comprehension treatment plan. • Environmental engineering : environmental around them to be constructed to minimize these distractions <ul style="list-style-type: none"> ○ E.g. seated in first row in the 	<p>Teacher Questions Q1: Outline the role of a teacher in the prevention of hyper kinetic disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	OHP & LCD slides	How can a teacher help in prevention of mental problems among school children?
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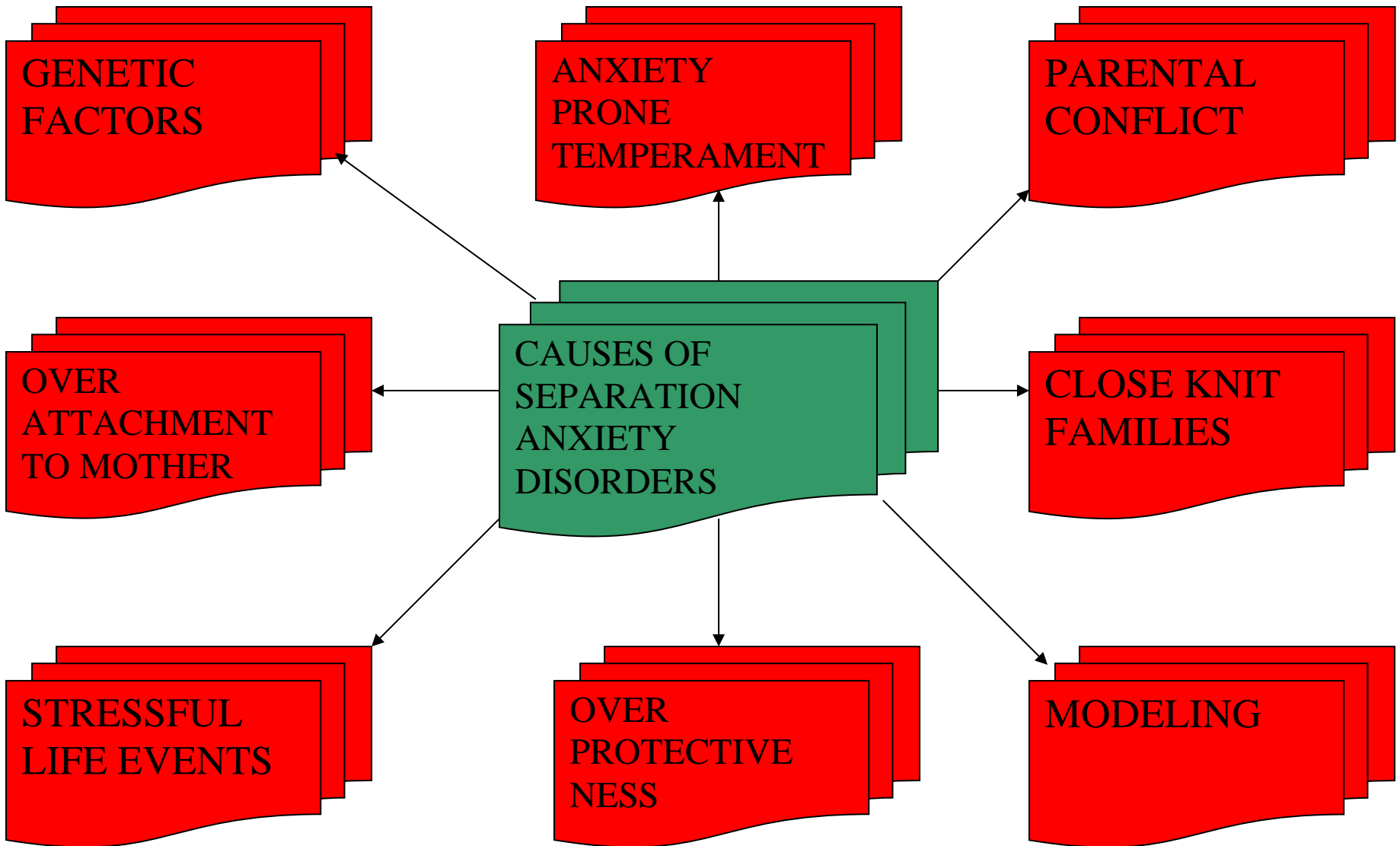
		<p>class room</p> <ul style="list-style-type: none"> ○ Study cassettes <p>One on one instruction or small group institution</p> <p><i>Ensuring the child's safety and that of others:</i></p> <ul style="list-style-type: none"> • Stop unsafe behavior • Provide close supervision • Give clear direction about acceptable and unacceptable behavior. <p><i>Improved role performance;</i></p> <ul style="list-style-type: none"> • Give positive feedback fro meeting expectations • Manage this environment [Provide a quiet place free of distractions for task completion] <p><i>Simplify instruction / directions:</i></p> <ul style="list-style-type: none"> • Get child's full attention • Break complex task into small steps • Allow breaks <p><i>Structure daily routines:</i></p> <ul style="list-style-type: none"> • Establish a daily routine • Minimize the changes 			
00.58 Mts.			<p>SUMMARY:</p> <p>Teacher summarizes the lesson with main points emphasizing the main aspects.</p>		
00.59 Mts			<p>ASSIGNMENT:</p> <p>Teacher directs the participants to apply Rutters' Scale on at least 5</p>		

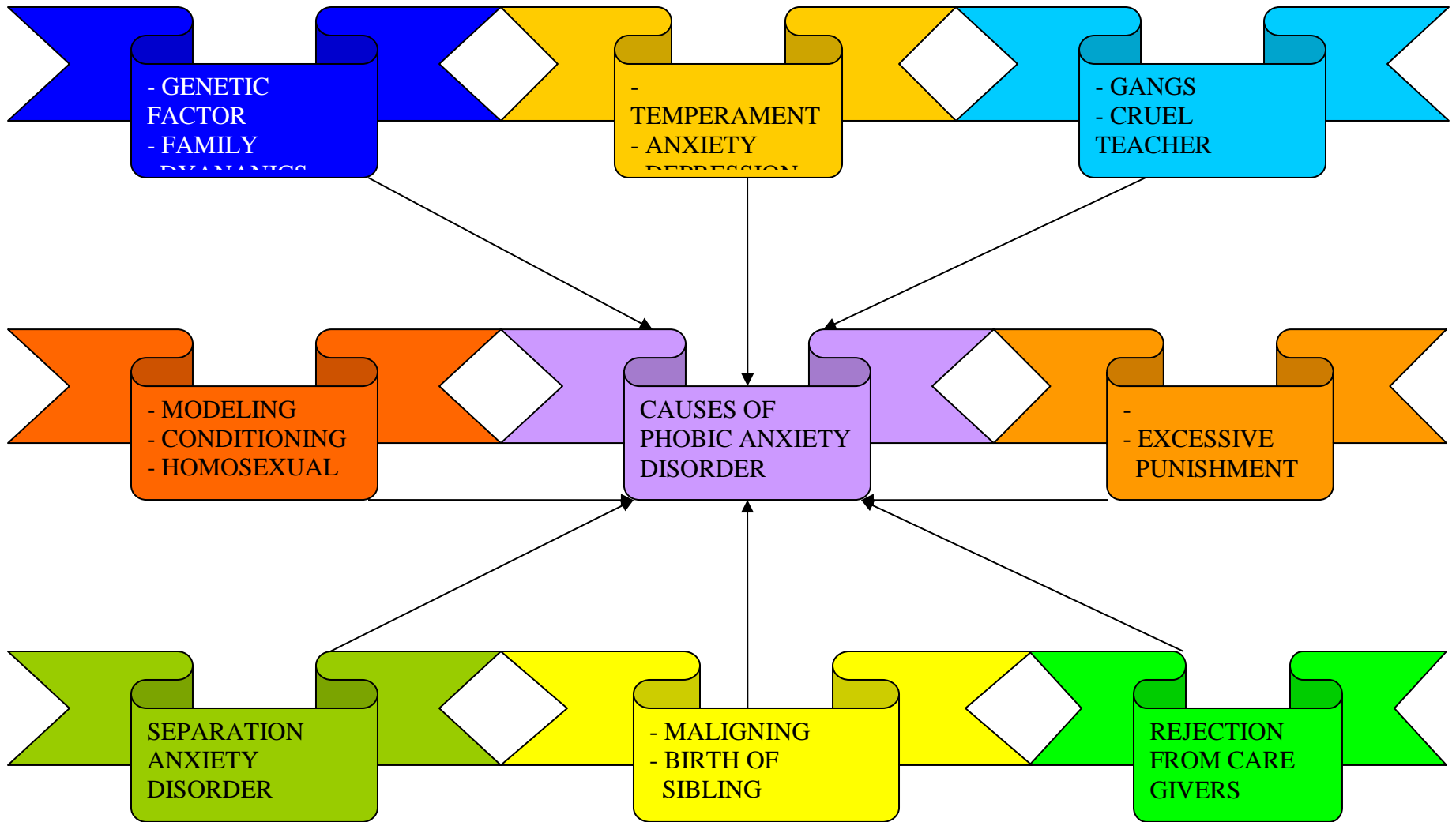
			children on whom they suspect to be having mental health problems.		
00.60 Mts			<p>EVALUATION:</p> <p>Teacher makes evaluation of structured teaching programme by asking recapitulating questions.</p> <ol style="list-style-type: none"> 1. What are the different types of common mental problems? 2. What are the causes of phobias? 3. What are the causes of school phobias? 4. What are the problems of toilet training? 5. What is the etiology of emotional disorders? 6. What are the etiologies of Phobic anxiety disorder? 7. What is the etiology of school phobia? 8. What is the etiology of sibling rivalry? 9. What are the etiologies of toilet training? 10. How does one identify the emotional disorders in children? 11. How can a teacher help in prevention of mental problems among school children? 12. What is the role of a teacher 	LCD slides	

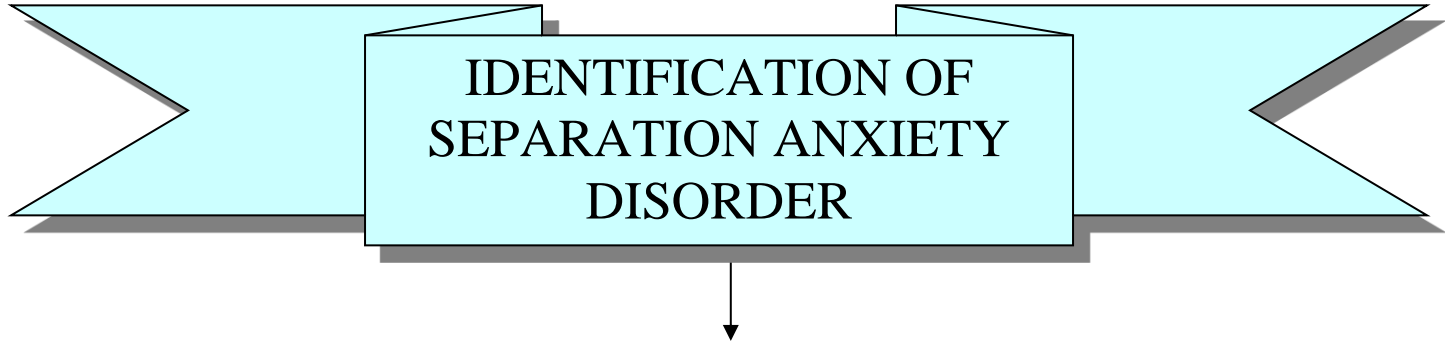
			<p>in the prevention of emotional disorders?</p> <p>13. What are the causes of conduct disorders in children?</p> <p>14. What are the etiologies of conduct disorders?</p> <p>15. How does one identify the emotional disorders in children?</p> <p>16. What is the role of a teacher in the prevention of conduct disorders?</p> <p>17. What is the role of a teacher in the prevention of conduct disorders?</p> <p>18. What are the causes of hyper kinetic disorders?</p> <p>19. What are the etiologies of hyper kinetic disorders?</p> <p>20. What are the etiologies of attention deficit disorder with hyperactivity?</p> <p>21. What are the methods of identification of hyper kinetic disorders?</p> <p>22. What is the role of a teacher in the prevention of hyper kinetic disorders?</p> <p>Teacher will clarify doubts if any and administer the post-test to evaluate the gain in knowledge after the structured teaching programme.</p>		
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IDENTIFICATION OF SEPARATION ANXIETY DISORDER

1. FEAR OF SLEEPING ALONE

2. POOR ATTENDANCE

3. WORRYING ABOUT HARMNESS
TO PARENTS

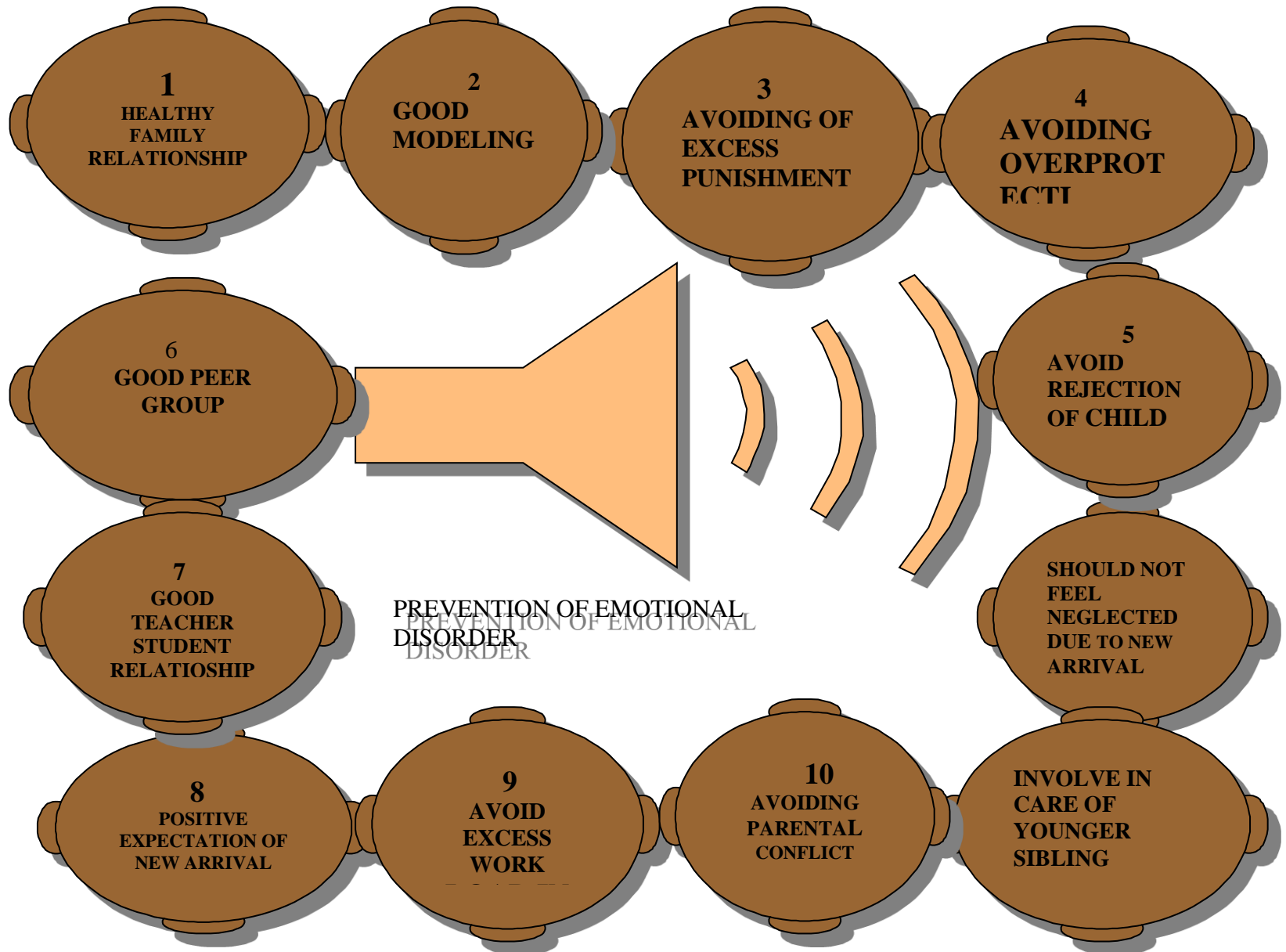
4. SOMATIC COMPLAINTS

5. DEPRESSED MOOD

6. SPECIFIC PHOBIAS

7. NIGHT MARES

8. TEMPER TANTRUM, CRYING,
SCREAMING



CAUSES OF CONDUCT DISORDER

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graph TD; A[CAUSES OF CONDUCT DISORDER] --> B[PARENTAL FACTORS]; A --> C[PSYCHOLOGICAL FACTORS]; A --> D[SOCIO CULTURAL FACTORS];
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PARENTAL FACTORS

- Physical aggression
- Verbal aggression
- Marital disharmony
 - Child abuse
- Parental rejection or negligence,
 - parental permissiveness
- Psychopathic parents
- Sociopath parents
- Alcohol and substance abuse
- Pathogenic family relationship
 - Harsh discipline

PSYCHOLOGICAL FACTORS

Poor emotional modulation
Such as anger and sadness
Frustration
Poor impulse control
Lack of basic needs
Inconsistent behaviour of the parents
Inadequate communication patters

SOCIO CULTURAL FACTORS

socio economic deprivation
urban environment
unemployed parents
lack of supportive social net work
lack of positive participation in
community
early institutional living

IDENTIFICATION OF CONDUCT DISORDER



1. AGGRESSION
TO PEOPLE
AND ANIMALS
2. PHYSICAL
FIGHTS
3. USE OF
WEAPONS
4. FORCED
SEXUAL
ACTIVITY

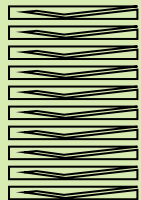
5. FIRE
SETTING
6. RAPE
7. ASSUALT
8. THEFT
9. DESTRUCTION
OF PROPERTY
10. LYING
11. STEALING

12. ROPPERY
13. SHOP
LIFTING
14. SERIOUS
VIOLATION
OF RULES
15. STAY OUT
OVER NIGHT
16. RUNAWAY

17. TRUANCY
FROM
SCHOOL
18. LACK OF
GUILT
19. POOR
FRUSTRATION
TOLERENCE
20. IRRITABLE
21. LOW SELF

22. FREQUENT TIMES OUTBURST
23. CRUEL IN NATURE
24. VANDALISM
25. IMPAIRMENT IN SOCIAL, ACADEMIC AND OCCUPATIONAL
FUNCTION

TECHNIQUES IN MANAGING CONDUCT DISORDER

SIGNALS
&
GESTURE
S

CLOSE
PHYSICA
L TOUCH

ADDITIONA
L
AFFECTION
& INVOLVE

HUMOR
& EXTRA
ASSIST
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CLARIFICA
TION

RESTRUC
TURING

REGROUPING

PHYSICAL
RESTRAIN

REWARDS
&
PROMISE

PUNISH
MENT &
THREAD
S

PREVENTION OF CONDUCT DISORDER



1. SET LIMIT FOR UNACCEPTABLE

2. TEACH PROBLEM SOLVING SKILLS

3. ROUTINE SCHEDULE FOR DAILY

4. PROVIDE POSITIVE FEED BACK

5. CONCENTRATE ON DISCIPLINE

6. USE BEHAVIORAL CONTRACT

7. USE CONSISTENT BEHAVIOUR IN

8. TEACH SOCIAL SKILL

9. ENCOURAGE THE CHILD TO HAVE

10. INSTITUTE TIMEOUT

ATTENTION
DEFICIT
DISORDER WITH
HYPERACTIVITY

TYPES OF
ATTENTION
DEFICIT HYPER
KINETIC
DISORDER

ATTENTION
DEFICIT
DISORDER WITH
OUT
HYPERACTIVITY

ATTENTION
DEFICIT
DISORDER WITH
CONDUCT
DISORDER

CAUSES OF ATTENTION DEFICIT HYPER KINETIC DISORDER

GENETIC FACTORS: MONOZYGOTIC, SIBLING & BIOLOGICAL PARENTS

BIOCHEMICAL FACTORS: DECREASED DOPAMINE OR NOR EPINEPHRINE

PRENATAL FACTORS: SMOKING & SUBSTANCE ABUSE - PREGNANCY

INTANATAL FACTORS: PREMATUREITY, FOETAL DISTRESS, LOW ABGAR SCORE & PRECIPITATED OR PROLONGED LABOUR

POSTNATAL FACTORS: INFECTION, TOXIC, METABOLIC, MECHANICAL DAMAGE, CEREBRAL PALSY, CIRCULATORY & HAEMOGLOBIN DISORDER

ENVIROMETAL FACTORS: LEAD, FOOD DYES, ADDITIVE ARTIFICIAL FLAVOURING, PRESERVATIVES & SUGAR

OTHER FACTORS: DEVELOPMENTAL LEARNING DISORDER, CHILD TEMPERAMENT

FAMILIAL FACTORS: PROLONGED MATERNAL DEPRIVATION, FAMILY DISHARMONY & ALCOHOLISM, HYSTERIA, SOCIO PATH IN THE FAMILY

IDENTIFICATION OF ATTENTION DEFICIT HYPER KINETIC DISORDER

POOR ATTENTION SPAN WITH DISTRACTIBILITY

- FAIL TO COMPLETE THE TASK
- SHIFT FROM ONE UNCOMPLETED TASK TO ANOTHER
- DOES NOT SEEM TO LISTEN
- EASILY DISTRACTED BY EXTERNAL STIMULI
- OFTEN LOOSE THINGS

HYPERACTIVITY

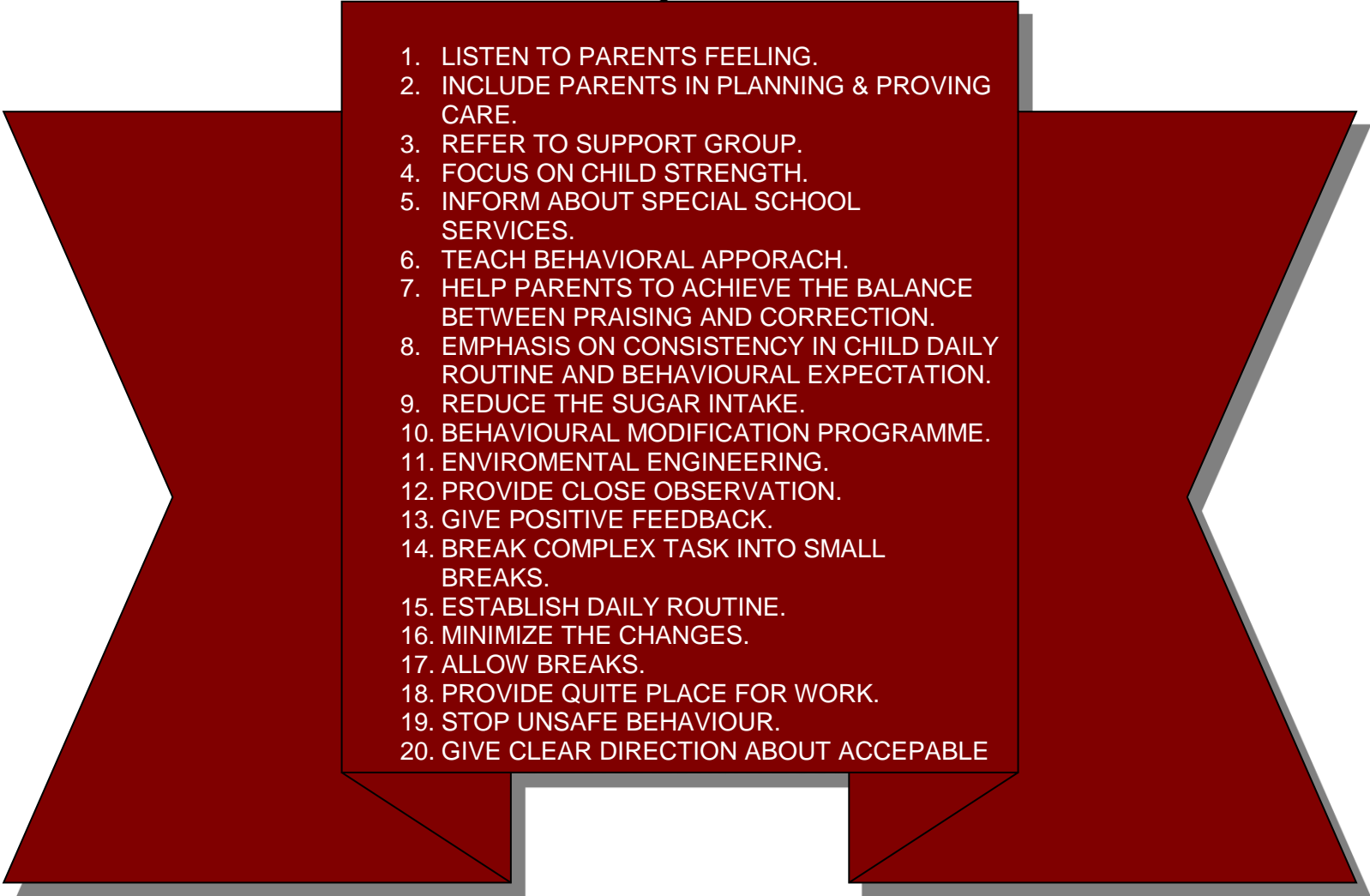
- FIDGITY
- DIFFICULTY IN SITTING STILL AT ONE PLACE FOR LONG
- MOVING ABOUT HERE AND THERE
- TALK EXCESSIVELY
- INTERFERENCE IN OTHERS ACTIVITY

IMPULSIVITY

- ACT BEFORE THINKING ON THE SPUR OF THE MOMENT
- DIFFICULTY IN WAITING FOR TURN AT WORK OR PLAY

PREVENTION OF ATTENTION DEFICIT HYPER KINETIC DISORDER



1. LISTEN TO PARENTS FEELING.
 2. INCLUDE PARENTS IN PLANNING & PROVING CARE.
 3. REFER TO SUPPORT GROUP.
 4. FOCUS ON CHILD STRENGTH.
 5. INFORM ABOUT SPECIAL SCHOOL SERVICES.
 6. TEACH BEHAVIORAL APPORACH.
 7. HELP PARENTS TO ACHIEVE THE BALANCE BETWEEN PRAISING AND CORRECTION.
 8. EMPHASIS ON CONSISTENCY IN CHILD DAILY ROUTINE AND BEHAVIOURAL EXPECTATION.
 9. REDUCE THE SUGAR INTAKE.
 10. BEHAVIOURAL MODIFICATION PROGRAMME.
 11. ENVIROMENTAL ENGINEERING.
 12. PROVIDE CLOSE OBSERVATION.
 13. GIVE POSITIVE FEEDBACK.
 14. BREAK COMPLEX TASK INTO SMALL BREAKS.
 15. ESTABLISH DAILY ROUTINE.
 16. MINIMIZE THE CHANGES.
 17. ALLOW BREAKS.
 18. PROVIDE QUITE PLACE FOR WORK.
 19. STOP UNSAFE BEHAVIOUR.
 20. GIVE CLEAR DIRECTION ABOUT ACCEPABLE
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STRUCTURED TEACHING PROGRAMME SESSION – II

<p>TOPIC: ‘Identification of Common Mental Health Problems among school children’.</p> <ul style="list-style-type: none">➤ Developmental disorder.➤ Eating disorder.➤ Habit disorder. <p>GROUP: Primary School Teachers</p> <p>PLACE: Government primary Schools, Anekal Taluq.</p> <p>TIME: (Duration) 60 Minutes.</p> <p>MEDIUM OF INSTRUCTION: Kannada</p> <p>METHOD OF TEACHING: Lecture-cum-discussion.</p> <p>TEACHING AID: Charts, flannel-o-graph, models and slides.</p> <p>GENERAL OBJECTIVES: Participants,</p> <ol style="list-style-type: none">3. Understand the causes, detection and prevention of common mental health problems among primary school children.4. Apply the knowledge in the identification of the above conditions.	<p>SPECIFIC OBJECTIVES: Participant will be able to:</p> <ol style="list-style-type: none">14. State the causes of developmental disorders.15. State the etiology of developmental disorders.16. State the method of identification of developmental disorders.17. Describe the role of a teacher in the prevention of developmental disorders.18. State the causes of eating disorders.19. Enumerate the etiology of eating disorders.20. State the method of identification of eating disorders.21. Describe the role of a teacher in the prevention of eating disorders.22. State the causes of habit disorders.23. Enumerate the etiology of habit disorders.24. State the method of identification of habit disorders.25. Describe the role of a teacher in the prevention of habit disorders.
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TIME	OBJECTIVE	CONTENT	TEACHING / LEARNING ACTIVITY	A.V.AIDS	EVALUATION
00:00 Mts			REVIEW OF PREVIOUS LESSON 23. What are the different types of common mental problems? 24. What are the causes of phobias? 25. What are the problems of toilet training? 26. What is the etiology of emotional disorders? 27. What is the etiology of school phobia? 28. What is the etiology of sibling rivalry? 29. How can a teacher help in prevention of mental problems among school children? 30. What are the causes of conduct disorders in children? 31. How does one identify the emotional disorders in children? 32. What are the causes of hyper kinetic disorders? 33. What are the methods of identification of hyper kinetic disorders? 34. What is the role of a teacher in the prevention of hyper kinetic		

			disorders?		
00:02 Mts.			ANNOUNCEMENT OF THE TOPIC: Causes, detection and prevention of common mental health problems among primary school children. Session II: <ul style="list-style-type: none"> ➤ Developmental disorder. ➤ Eating disorder. ➤ Habit disorder. 		
00: 03 Mts.	Describe the main types of mental health problems.	Common Mental Health Problems: <ul style="list-style-type: none"> ➤ Emotional disorder. ➤ Conduct disorder. ➤ Hyper kinetic disorder. ➤ Developmental disorder. ➤ Eating disorder. ➤ Habit disorder. 	Teacher interacts with the participants and questions: Q1: What is the importance of mental health? Q2: How does one maintain mental health? Q3: What happens when mental health is neglected? Participants answer and the teacher supplements the answers and puts emphasis on importance of mental health by projecting slides.	Slide # 1: Common Mental Health Problems	What are the different types of common mental problems?
	List the types of	Developmental Disorders: <ul style="list-style-type: none"> ○ Mental retardation ○ Specific developmental disorder of speech and 			

00:08 Mts.	developmental disorder State the causes of developmental disorders.	<p>language</p> <ul style="list-style-type: none"> ○ Specific developmental disorder of scholastic skill ○ Specific developmental disorder of motor functioning <p>Causes of mental retardation</p> <p>Prenatal Causes: [Probably in 10% of cases]</p> <ul style="list-style-type: none"> ○ Infection: Rubella, Syphilis, toxoplasmosis, cytomegalo-inclusion body disease, HIV. ○ Pre-maturity ○ Birth trauma ○ Hypoxia [Birth asphyxia] ○ Intrauterine growth retardation ○ keenicterus ○ Placental abnormalities ○ Drug during first trimester ○ Toxins, anti convulsants, fetal alcohol syndrome. <p>Acquired Physical disorders in Childhood [probably in 2 – 5% cases]</p> <ul style="list-style-type: none"> • Infection especially meningitis & encephalitis • Cretinism • Trauma [head] 	<p>Teacher questions: Q1: What are the causes of mental retardation?</p> <p>Participant responds</p> <p>Teacher appreciates the responses and supplements the answers.</p>		What are the causes of mental retardation?
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		<ul style="list-style-type: none"> • Lead poisoning [toxins] • Hypothyroidisms [endocrine] • Cerebral palsy <p>Genetic factor [probably in 5 % of cases]</p> <ul style="list-style-type: none"> • Down syndrome, fragile syndrome, Turner's syndrome, Kinefelter's syndrome Chromosomal abnormalities reader – Willi • Inborn errors of metabolism <ul style="list-style-type: none"> ○ Amino acids [Phenyl Ketonuria, homocystinurea, Hartnup's disease] ○ Lipids [Tay-sachs disease, Gaucher's disease, Niemann – pick disease] ○ Carbohydrate [Galactosemia, glycogen storage disease] ○ Puriness [Leseh Nyhan syndrome] ○ Mucopolysacharidis [Hurlu's disease, Heiste's disease, Sanfillipo's disease] • Single gene disorders [Tuberous sclerosis, neurofibromatosis, and dystrophia myotonica] • Cranial anomalies[Microcephally] • Brain Malfunctions [Neural tube 			
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		<p>defect]</p> <p>Psychosocial causes [Probably in 15% of cases]</p> <ul style="list-style-type: none"> ○ Malnutrition ○ Socio cultural deprivation ○ Low parental IQ ○ Poor parenting skills ● Psychiatric disorders [Probably in 1 -2 % of cases] ○ Infantile autism ○ Childhood onset schizophrenia <p>Other causes:</p> <ul style="list-style-type: none"> ○ Poor nutrition of mother during pregnancy ○ Low level of iodine in the salt ○ Prolonged labor ○ Umbilical cord trapped around the neck ○ Severe and prolonged jaundice ○ Uncontrolled convulsion, accident, malnutrition in children <p>Child abuse, emotional neglect.</p>			
00:13 Mts.		<p><u>Etiology of Specific developmental disorders disorder of speech and language</u></p> <p>This is also called as communication disorder developmental language disorders [or] Dysphasia About 1% of children are seriously affected with speech problems at the time of</p>	<p>Teacher questions:</p> <p>Q1: What is the etiology of specific developmental disorders of speech and language?</p>	LCD slides	<p>What is the etiology of specific</p>

		<p>joining school and some 5 % children have difficulty in making themselves understood by stranger.</p> <p>There are no neurological [or] speech mechanism abnormalities as well as sensory impairment, mental retardations [or] environmental factors, primary causes could be learning disability, deafness [or] pervasive developmental disorder.</p> <p>1. Speech articulation disorder [phonation disorder]</p> <p>This is called as dyslexic. By age of 6-7 most sounds are acquired and by 11-12 years of age this child has full mastery over phonation. In phonation disorder this is not achieved.</p> <p>The child presents with problems forming speech sounds, mispronounces, calls and lip sounds may be omitted, distorted [or] substituted. [e.g. Rabbit is pronounced as rabbit]</p>	<p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p> <p>Teacher questions: Q1: What are the manifestations of speech articulation disorder?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	<p>LCD slides</p>	<p>developmental disorders of speech and language?</p> <p>What are the manifestation of speech articulation Disorder?</p>
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		<p>It is characterized by below par accuracy in this use of speech sound despite normal language skills. In general, in spite of errors in speech sound production this child is able to make his speech understood to strangers. In severe articulation error, this speech is totally unintelligible; it is difficult for others to understand this speech.</p> <p>2. Expressing language disorder : It is characterized by a below par ability of using the expressive speech [i.e.] language comprehension is normal but he expressive ability is defective. There may [or] may not be articulated defects. The ability to use single words by 2 years [or] 2 word phrases by 3 years is abnormal_and indicates expressive language disorders. The problem includes restricted vocabulary difficulty in selecting appropriate words, immature grammatical usage, cluttering of speech, omission of suffixes and prefixes, syntactical error are common. Child resorts to sign language to indicate his wishes.</p>	<p>Teacher questions: Q1: What are the manifestations of expressive language disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	LCD slides	<p>What are the manifestations of expressive language disorder?</p>
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		<p>3. Receptive language disorder</p> <p>The disorder often presents as receptive-expressive language disorder i.e., both receptive and expressive impairment are present together. This disorder is characterized by a below par understanding of the language is defective often there are articulation abnormalities also.</p> <p>In this normal cause of events the child should be able to identify some familiar object by 18 months and follow simple verbal instruction by this end of 2 years. Failure of these is the absence of organic defect [e.g. deafness] or some other primary causes [e.g. autism] Indicates presence of receptive language disorder, other features include this inability to understand grammatical structures [e.g. negatives, questions etc.,]</p>	<p>Teacher questions: Q1: What are the manifestations of Receptive language disorder?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	LCD slides	What are the manifestations of Receptive language disorder?
		<p>4. Acquired aphasias with epilepsy [Landar – Kleffer syndrome]</p> <p>Here the previously acquired language skills are lost with both expressive and receptive language disorders. The general intelligence is retained. There are EEG</p>	<p>Teacher questions: Q1: What are the problems of Acquired aphasias with epilepsy?</p> <p>Participants respond.</p>	LCD slides	

		<p>abnormalities and most of the affected children develop seizures. A small percentage of affected children have permanent receptive language disturbances.</p> <ul style="list-style-type: none"> • Genetic factors of hereditary factors are supported by findings that most children with disorder of written expression have first degree relatives with this disorder. • Subtle cerebral damage and maturational lag in cerebral development • Educational and environmental failures • Loss of the normal left-right brain asymmetry in this perisylvian and planum temporal region. <p><u>Specific development disorder of scholastic skill:</u> These disorders are attributed to developmental defect in negative processing and are not due to acquired disease, sensory deficit [or] lack of opportunities to learn. The sub categories include this following:</p> <ul style="list-style-type: none"> • Specific reading skill • Specific spelling skill 	<p>Teacher supplements the knowledge by suitable discussion.</p> <p>Teacher questions: Q1: What are the Specific development disorders of scholastic skill?</p> <p>Participants respond.</p>	LCD slides	<p>What are the problems of Acquired aphasia with epilepsy?</p>
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		<ul style="list-style-type: none"> Specific disorder of arithmetical skill. 	Teacher supplements the knowledge by suitable discussion.		
00.15Mts.	State the method of identification of specific developmental disorder of scholastic skill.	<p>Method of identification of developmental disorders of scholastic skill:</p> <p>History taking & observation of the child. History taking: ➤ Teacher should question the parents on whether the child has developmental problems. Observation : Each child should be observed carefully.</p> <p><i>Specific reading skill:</i> It is also called as dyslexia [or] developmental reading disorder. These refers to significant impairment of development of reading skills in the absence of primary cause like mental retardation, visual problems, lack of schooling and opportunities.</p> <p>The child presents with a serious delay in learning to read that is evident from the early years. There</p>	<p>Teacher Questions Q1: Outline the method of identification of specific developmental disorder of scholastic skill Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher Questions Q1: Outline the method of identification of specific reading skill. Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>Flannel-o-graph depicting pictures of children.</p> <p>Flannel-o-graph depicting pictures of children.</p>	<p>What are the methods of identification of specific developmental disorder of scholastic skill?</p> <p>What are the methods of</p>

		<p>are problems related to recognition and recall comprehension and presents as omissions, addition , distortion [or] substitutions of words long hesitation or slow reading rate and reversal of words[balanced reading]. Defective comprehension presents as inability to recall facts to draw conclusion as well as inability to apply generally information to answer questions related to passage read by the child.</p> <p>Writing and spelling are also impaired. It is important to differentiate this disorder from scholastic backwardness.</p> <p><i>Specific spelling disorder:</i></p> <p>Here there is specific and significant impairment in the development of spelling skills in the absence of a specific reading disorder, words are miss spelt orally and while writing which is not attributable to faults in teaching or due to sensory deficits.</p> <p><i>Specific disorder of arithmetic skill</i></p>	<p>Teacher Questions Q1: Outline the method of identification of specific spelling disorder.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>LCD slides</p>	<p>identification of specific reading skill?</p> <p>What are the methods of identification of specific spelling disorder.</p> <p>How does one</p>
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	<p><i>[mathematical disorder]:</i> It is also called as developmental arithmetic disorder or dyscalculia. These relate to defect in arithmetical skills not attributable to mental retardation, learning disability. The child presents with arithmetic abilities well below the level of expected for the mental age. [below par] The problems may include failure to understand simple mathematical concepts, failure to recognize mathematical signs or numerical symbols, difficulty in carrying out mathematical manipulation, difficulty in learning mathematical tables. Even basic computation skills are affected like additions, subtractions etc., and not the complex ones. [e.g. algebra.]</p>	<p>Teacher Questions Q1: Outline the method of identification of specific disorder of arithmetic skill.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>LCD slides</p>	<p>identify the specific disorder of arithmetic skills in children?</p>
	<p><u>Specific developmental disorder of motor functions</u> It is also called as motor skills disorder developmental coordination disorders, clumsy child syndrome or motor dysphasia. It is characterized by poor</p>	<p>Teacher Questions Q1: Outline the method of identification of specific disorder of motor function.</p> <p>Participants respond</p>	<p>LCD slides</p>	<p>What are the methods of identification of specific disorder of motor functions?</p>

		<p>coordination in daily activities of life [e.g. in dressing, walking feeding and playing. There is an inability to perform gross motor tasks in the absence of neurological disorder motor. Mile stones and delayed and child is slow to learn, to run hop and climb stairs up and down. The child is clumsy in movements, drop things and stumbles and bumps into obstacles. There is difficulty in throwing and catching balls, fastening and unfastening buttons and tying shoe laces. Hand writing is poor as are the drawing skills. These children are poor in solving jigsaw puzzles and in using instructional toys.</p>	<p>Teacher acknowledges the correct response and supplements with explanation.</p>		
00.20 Mts	Describe the role of a teacher in the prevention of developmental disorders.	<p>Role of a teacher in the prevention of developmental disorders: Give health education and advice on sound mental health principles to both parents and children.</p> <p>The treatment of developmental coordination disorder generally include versions of sensory integration program and modified physical education [consists of physical activities that increase motor and sensory functions]</p>	<p>Teacher questions. Q1: What is the role of a teacher in the prevention of developmental disorders?</p> <p>Participants respond.</p> <p>Teacher supplements the answer by suitable discussions</p>	LCD slides	<p>What is the role of a teacher in the prevention of developmental disorders?</p>

		<p>Adaptive physical education program are designed to help children enjoy exercise and physical activities without the pressure of team sports.</p> <p>The children with coordination disorder may also benefit from social skills groups and other physical intervention.</p>			
00.23 Mts.	State the causes of eating disorders.	<p>Causes of eating disorders:</p> <p>The term eating disorder is a deceptively simple phrase that refers to an extremely complex group of psychiatric disorders with physical, psychological and social dimensions. The DSM IV [APA 1994] eating disorders are described in two separate places for the first time. Feeding and eating disorders of infancy and childhood are discussed with other disorders commonly beginning in childhood whereas anorexia nervosa and bulimic nervosa appear in separate section. These disorders in this category are specific to childhood, Pica, rumination disorders and</p>	<p>Teacher questions: Q1: What do you mean by eating disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	OHP Slide # 2.	What do you mean by eating disorders?

		<p>feeding disorders of infancy and early childhood [failure to thrive]</p> <p><i>Pica:</i> Pica is a disorder in which this child persistently eats non-nutritive substance [such as paints, plaster string, hair, cloth, animal droppings, insects or leaves]. Pica is commonly seen in children with mental retardation. To be considered a disorder, the behavior must be inappropriate for the development level of the child and not part of culturally sanctioned practices. This disorder is most frequently seen in preschool children, lack of adequate supervision, neglect and poverty increases the possibility of this problem. Usually the disorder lasts only for a few months but it can continue into adolescent an adult hood. Then term pica is derived from a Latin word for magpie, a scavenger bird more common in low socio-economic status [10-32%].</p>	<p>Teacher questions: Q1: What do you mean by pica in children?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	<p>OHP Slide # 3.</p>	<p>What do you mean by pica in children?</p>
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		<p><i>Rumination Disorder [Merycism]</i></p> <p>Rumination is derived from Latin word suninare, which means to chew to the end. [reported in 1907] it is a potentially fatal disorder that is most common in infancy and early childhood and is characterized by purposeful expulsion of previously infested food followed by re-chewing of the food, for at least one month in absence of gastro-intestinal track illness that is not due to anorexia nervosa and bulimia nervosa. This disorder usually starts between 3 and 12 months of age equal prevalence in boys and girls. In considerable number cases there is family background of marked instability</p>	<p>Teacher interacts with the participants and questions: Q1: What do you mean by rumination disorder in children?</p> <p>Participants answer and the teacher supplements the answers and puts emphasis on importance of rumination disorder by projecting slides.</p>	OHP Slide # 4.	What do you mean by rumination disorder in children?
00.25Mts.	Enumerate the etiology of eating disorders.	<p>Etiology of eating disorders:</p> <p>No single factor can account for eating disorder; rather many bio-psycho-social factors contribute to development of disorder.</p> <p><i>Emotional factor:</i> common stressful factor associated with pica are: Parent child problems [repeated traumatic separation, unfilled oral needs or deprivation of oral needs, parental neglect, beloved or</p>	<p>Teacher questions. Q1: What are the etiologies of eating disorders? Participants respond.</p> <p>Teacher supplements the answer by suitable discussions. Teacher acknowledges the responses and explains.</p>	Charts OHP Slide # 5.	What are the etiologies of eating disorders?

		<p>overprotected child, sibling rivalry, disharmony among parents, loss or separation of parents or beginning of school.</p> <p>Organic factors: Mental retardation: children with MR mouth more than normal children.</p> <p>Nutritional deficiency: Deficiencies of vitamins and minerals [Iron deficiency can cause a craving for ice and non food items]</p> <p>Worm infestation: A variety of rare homological condition can cause children to mouth non food items. E.g. Liver – Bucy syndrome.</p> <p>Cultural factor may play a role in some cases, where the ingested substance is believed to have magical or medicinal property.</p> <p>Food and chewing may take on a transitional quality for the child and sooth the infant when alone. [Pleasure habit] much like a special doll or blanket.</p> <p>Hereditary: Occurrence in several members of the family members is not infrequent.</p> <p>Psychological [finger sucking, disturbed parent child interaction]</p>		<p>Charts</p> <p>OHP Slide # 6.</p>	
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00.30 Mts.	State the method of identification of eating disorders.	<p>Method of identification of eating disorders: History taking & observation of the child. History taking: ➤ Teacher should question the parents on whether the child has conduct problems. Observation : Each child should be observed carefully for:</p> <p>If this child has repeated ingestion of a non-nutritive substance, inappropriate to developmental level, for at least one month in infant who do not meet the criteria for autism, schizophrenia or Kline – Levin syndrome.</p> <p>If the child suffers from worm ingestion, trichobezors, Iron and Zinc deficiency and lead poisoning, cholera and enteric fever.</p> <p><u>DSM IV – TR [Diagnostic criteria for Pica]</u> Persistently eating of non-nutritive substance for a period of at least one month. • The eating of non-nutritive</p>	<p>Teacher Questions Q1: Outline the method of identification of eating disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher Questions Q1: Outline the method of identification of eating disorders in relation to diagnostic criteria for</p>	<p>Flannel-o-graph depicting pictures of children.</p> <p>OHP Slide # 7.</p>	<p>How does one identify the eating disorders in children?</p> <p>How does one identify the pica in children?</p>
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		<p>substance in inappropriate to the development level.</p> <ul style="list-style-type: none"> • The eating behavior is not part of a culturally sanctioned practice. • If the eating disorder occurs exclusively during the cause of another mental disorder [MR or PDD] it is sufficiently severe to warrant independent clinical attention. <p><i>Rumination Disorder [Merycism]</i> Usually partially digested food brought back into the mouth without nausea, retching, disgust or associated GI disorders, and then the food is ejected from the mouth or chewed and re-swallowed. Characteristic position of straining and aiding the back with his head held back is observed. Sucking movement of the tongue occurs, infant give impression of gaining considerable satisfaction from the activity Commonly there are irritability and linger between episodes of regulation associated with head idling, head banging, body rocking and hair pulling Common weight loss or failure to gain expected weight.</p>	<p>Pica</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher Questions Q1: Outline the method of identification of eating disorders in relation to rumination disorder.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>LCD showing slides depicting rumination disorder.</p>	<p>How does one identify the rumination disorder in children?</p>
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00.35 Mts.	Describe the role of a teacher in the prevention of eating disorders.	<p>Role of a teacher in the prevention of eating disorders:</p> <p><i>Family health education – eating disorder:</i> The strain of stress of living with someone with an eating disorder generates tension in the family common feeling include:</p> <ul style="list-style-type: none"> • Confusion about the eating disorder and recovery process • What caused it • How should I deal with it or approach my family members • Grief and anger • Guilt or fear <p><i>The best way to approach the family</i></p> <ul style="list-style-type: none"> • Express your concern honestly and tactfully • Be positive and open • Let the person know you are talking to her out of concern rather than criticism • Offer health education [services, resources] • Select a time when both are at ease to talk • Anticipate the family member's intense emotional reaction[anger, denial or relief • Encourage professional help 	<p>Teacher Questions</p> <p>Q1: Outline the role of a teacher in the prevention of eating disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p> <p>Teacher Questions</p> <p>Q1: Outline the role of a teacher in the prevention of eating disorders in relation to approach to family.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	LCD showing slides on role of a teacher in the prevention of eating disorders.	What is the role of a teacher in the prevention of eating disorders?
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		Encourage the family members to see the positive aspect of life without an eating disorder.			
00.40 Mts	State the causes of habit disorders.	Habit disorders: <ul style="list-style-type: none"> • These are stereotyped disorder which are intentionally and repetitively produced but serve no constructive or socially acceptable functions • The common habit disorder include thumb sucking, nail biting, trichotillomania, picking of nose, biting parts of body, skin scratching, body rocking and masturbation • These habits range from normal to abnormal depending on the severity of the occurrence and the time of presenting during the developmental period [what is normal] in infancy may be abnormal in later childhood] • Many of the habit disorder particularly those which are self-stimulating in nature are called qualification habits. 	<p>Teacher questions: Q1: What do you mean by habit disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>	Flannel-o-graph depicting pictures of children.	What do you mean by habit disorders?

00.45 Mts.	Enumerate the etiology of habit disorders.	<p>Etiology of habit disorders:</p> <p>1. Thumb sucking or finger sucking: <i>Developmental:</i> unpleasant and unsatisfied or originated feeding situation <i>Psychological:</i> Parents neglect, strictness of the parents, over protection, loneliness, sibling rivalry and boredom etc.,</p> <p>2. Nail biting:</p> <ul style="list-style-type: none"> • Insecurities associated with broken homes, constant quarrelling between parents, alcoholic parents or parents who do not care about the requirement of their children are contributing to maturity • Nail biting might also be an expression of excitement or aggression • Traumatic experience or fixation at the oral gratification • Unconscious and displaced form of masturbation activity • Act as self-punishment • Parent neglect, strictness, stress and excessive fear <p>Trichotillomania [haloprace]: It is defined as the irresistible urge</p>	<p>Teacher questions: Q1: What is the etiology of hyper kinetic disorders?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p> <p>Teacher questions: Q1: What is the etiology of</p>	<p>LCD slides</p> <p>OHP Slide # 8.</p> <p>LCD slides</p>	<p>What are the etiologies of habit disorders?</p>
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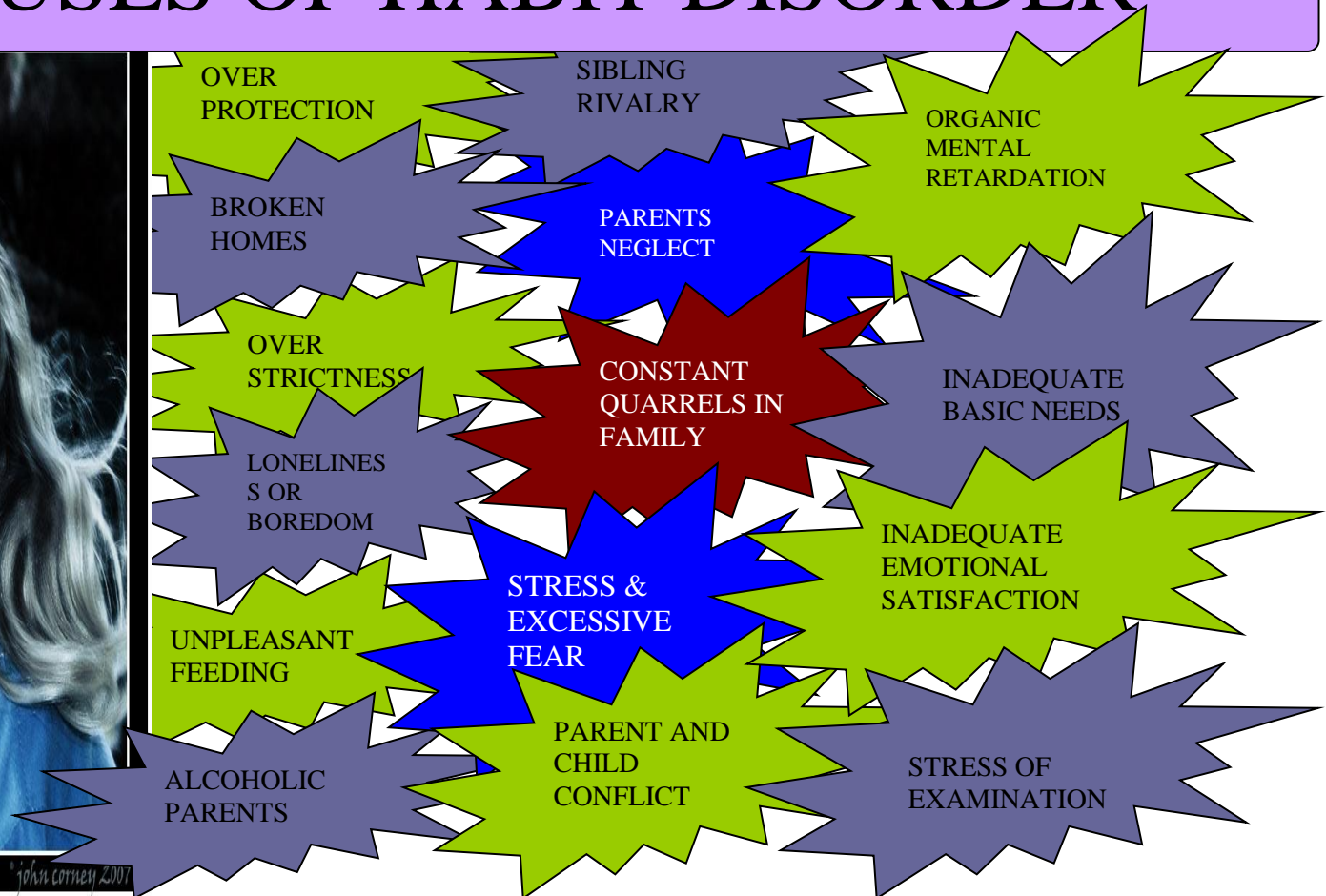
		<p>to pull [pluck] one's hair. Relatively uncommon incident rate is about 0.5% to 0.1% more common in females especially with long hair. It is usually found in all socio-economic status. It is common anxiety ridden children no particular age is exempt, and right from the age of 3 years onwards up to adulthood.</p> <ul style="list-style-type: none"> • Parent child conflict organic mental retardation • Inadequate emotional satisfaction • Loneliness, boredom, stress of exam, separation anxiety • Parent discord. 	<p>Trichotillomania [haloprace]?</p> <p>Participants respond.</p> <p>Teacher acknowledges the correct responses and supplements with explanation.</p>		<p>What is the etiology of Trichotillomania [haloprace]?</p>
00.50 Mts.	State the method of identification of habit disorders.	<p>Method of identification of habit disorders:</p> <p>History taking & observation of the child.</p> <p>History taking:</p> <ul style="list-style-type: none"> ➤ Teacher should question the parents on whether the child has habit disorder problems. <p>Observation :</p> <p>Each child should be observed carefully.</p>	<p>Teacher Questions</p> <p>Q1: Outline the method of identification of habit disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	LCD slides	<p>What are the methods of identification of habit disorders?</p>

00.55 Mts.	Describe the role of a teacher in the prevention of habit disorders.	Role of a teacher in the prevention of habit disorders: <ul style="list-style-type: none"> • Identification and removal of causes • Divisional activity • Identifications and removal of causes of tension through child guidance clinic • Distractions [pre-occupation with toys and children] • Behaviour modifications [aversion conditioning or positive reinforcement] • Good working rule to take the parents into confidence and make them to understand the factors contributing to the problem • Children can be treated with play therapy, individual and group therapy. 	<p>Teacher Questions Q1: Outline the role of a teacher in the prevention of habit disorders.</p> <p>Participants respond</p> <p>Teacher acknowledges the correct response and supplements with explanation.</p>	<p>LCD slides</p> <p>OHP Slide # 9.</p>	What is the role of a teacher in the prevention of habit disorders?

00.58 Mts.			SUMMARY: Teacher summarizes the lesson with main points emphasizing the main aspects.		
00.59 Mts			ASSIGNMENT: Teacher directs the participants to apply Rutters' Scale on at least 5 children on whom they suspect to be having mental health problems.		
00.60 Mts			EVALUATION: Teacher makes evaluation of structured teaching programme by asking recapitulating questions. 35. What are the different types of common mental problems? 36. What is the etiology of developmental disorders? 37. What are the etiologies of eating disorder? 38. What is the etiology of habit disorder? 39. How does one identify the developmental disorders in children? 40. How can a teacher help in prevention of mental problems among school children? 41. What is the role of a teacher in	LCD slides	

			<p>the prevention of eating disorders?</p> <p>42. What are the causes of habit disorders in children?</p> <p>43. What are the etiologies of habit disorders?</p> <p>44. How does one identify the habit disorders in children?</p> <p>45. What is the role of a teacher in the prevention of habit disorders?</p> <p>Teacher will clarify doubts if any and administer the post test to evaluate the gain in knowledge after the structured teaching programme.</p>		
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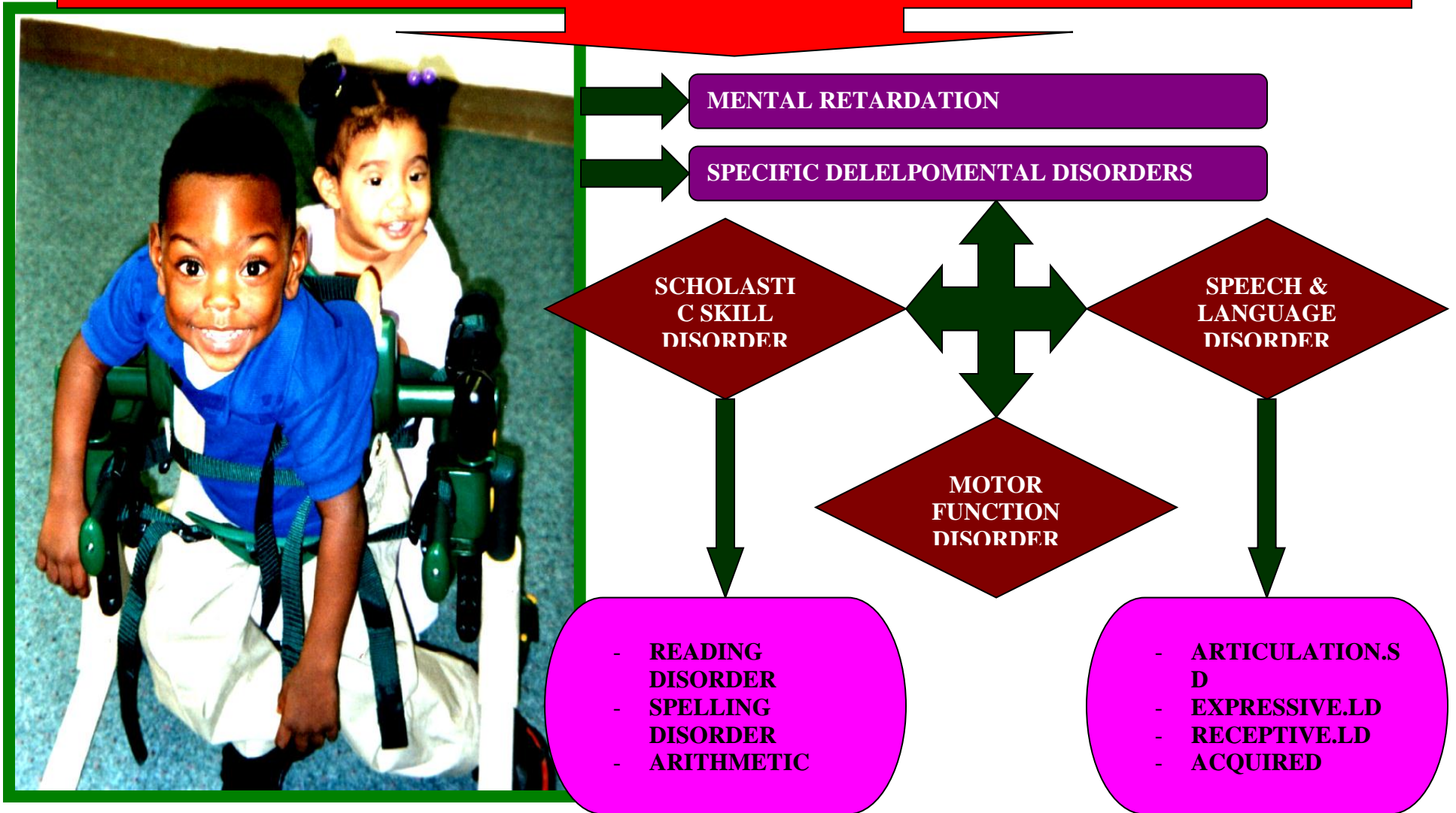
CAUSES OF HABIT DISORDER



PREVENTION OF HABIT DISORDER



TYPES OF DEVELOPMENTAL DISORDER



CAUSES OF MENTAL RETARDATION



PERINATAL FACTORS

- INFECTIONS (TORCH, HIV)
- PREMATURITY, IUGR
- BIRTH TRAUMA & ASPHYXIA
- DRUGS, TOXINS, ALCOHOL
- KERNICTERUS
- PLACENTAL ABNORMALITIES

ACQUIRED DISORDERS

- INFECTIONS
- CRETINISM
- HEAD TRAUMA
- LEAD POISONING
- CEREBRAL PALSY

OTHER CAUSES

- MALNUTRITION, LOW SOCIO ECONOMIC
- LOW PARENTAL IQ, POOR PARENTING
- INFANTILE AUTISM, CHILD ABUSE

GENETIC FACTORS

- CHROMOSOMAL ABNORMALITIES
- INBORN ERRORS OF METABOLISM
- SINGLE GENE DISORDERS

DETECTION OF

MILD MENTAL RETARDATION

- (IQ: 50-70): EDUCABLE (10YEARCHILD)
- COMMENEST (85-90%)
- MILD DELAY IN DEVELOPMENT OF MILE STONES
- SLOW LEARNER(REPEAT EARLY GRADES)
- IMMATURE BEHAVIOR
- POOR IMPULSE CONTROL
- LACK OF JUDGEMENT

PROFOUND MENTAL RETARDATION

- IQ:<20: LIFE SUPPORT(2 YEAR CHILD)
- SEVERE SYMPTOMS
- PHYSICAL RETARDATION
- DEFORMITIES
- PATHOLOGY OF CNS
- MUTISM
- MOTOR INCOORDINATION

MODERATE MENTAL RETARDATION

- IQ:35-49: TRAINABLE(1YEAR CHILD)
- PHYSICALLY
- CLUMSY
- LEARNING IS TOO SLOW
- RETARDATION IN MOST

SEVERE MENTAL RETARDATION

- IQ:20-34: TREATABLE (4YEAR CHILD)
- GROSS RETARDATION IN DEVELOPMENT FROM BIRTH
- SEVERE MOTOR & SENSORY DEFECTS,
- NO BASIC SKILLS
- NO BOWEL & BLADDER CONTROL
- NEEDED INSTITUTIONALIZATION



PREVENTION OF MENTAL



PRIMARY PREVENTION

1. INCREASING AWARENESS AMONG GENERAL PUBLIC
2. GENETIC COUNSELLING
3. AVOID CONSANGUINIOUS MARRIAGE
4. ADEQUATE PERINATAL CARE
5. UNIVERSAL IMMUNISATION

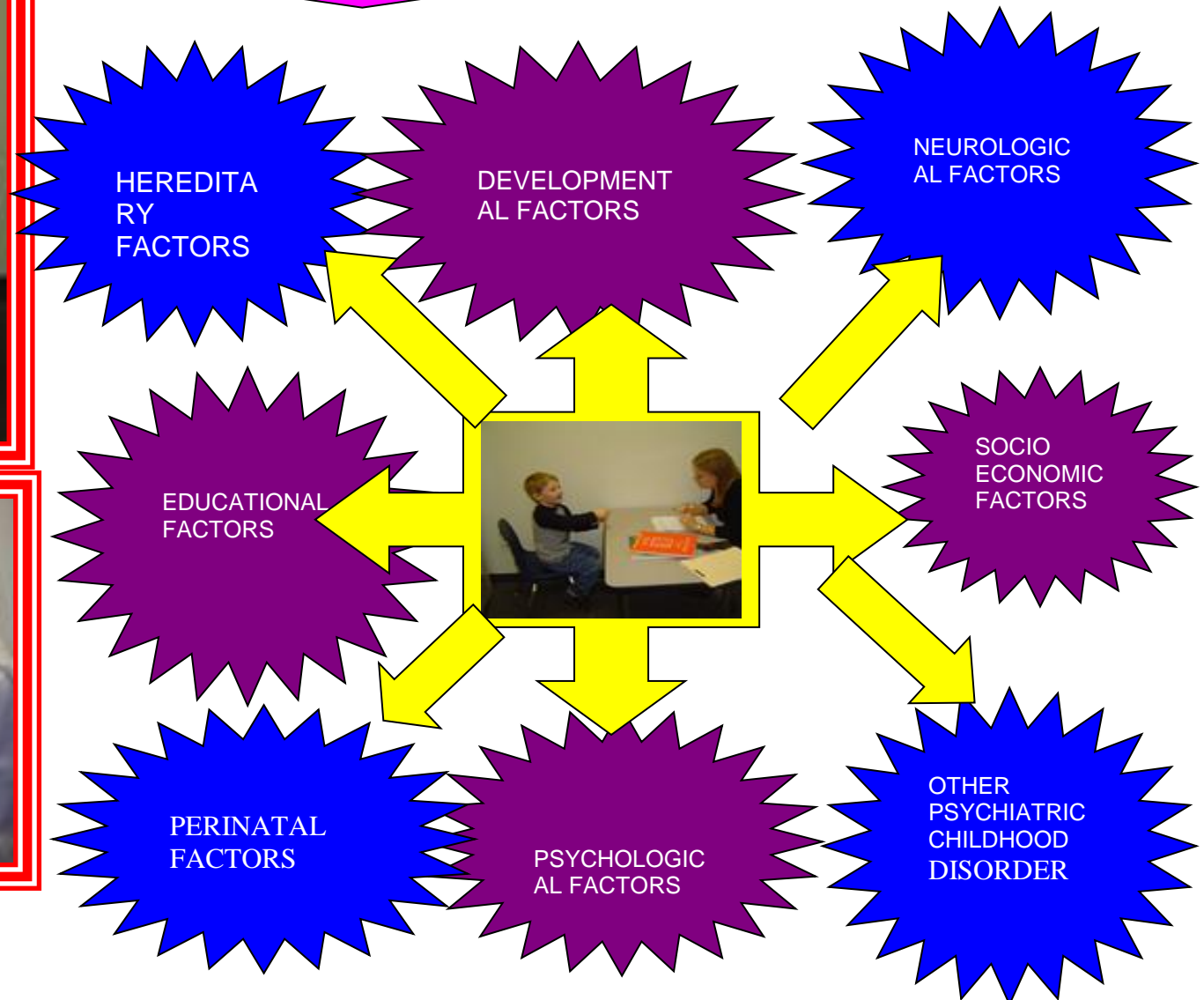
SECONDARY PREVENTION

1. EARLY DETECTION & TREATMENT OF
2. PREVENTABLE DISORDERS
3. SENSORY, MOTOR & BEHAVIOR HANDICAPS
4. CORRECTABLE DISORDERS
5. PSYCHIATRIC TREATMENT MODALITIES

TERTIARY PREVENTION

1. BEHAVIOR MODIFICATION
2. DAY CARE CENTRES
3. INTEGRATED SCHOOL
4. VOCATIONAL TRAINING SCHOOL
5. PARENTAL COUNSELLING

CAUSES OF SPECIFIC DEVELOPMENTAL DISORDER





IDENTIFICATION OF SPECIFIC DEVELOPMENTAL DISORDER

SPEECH & LANGUAGE DISORDER

1. ARTICULATION

- PROBLEM IN FORMING SPEECH
- MISPRONUNCIATION
- OMISSION, DISTORTION & SUBSTITUTION OF WORDS

2. EXPRESSIVE

- DEFECT IN ONLY EXPRESSION
- RESTRICTED VOCABULARY
- IMMATURE GRAMMER

3. RECEPTIVE

- DEFECT IN SOUND

4. ACQUIRED PREVIOUS SKILLS ARE LOST

SCHOLASTIC DISORDER

1. READING

- PROBLEM IN COMPREHENSION
- RECALL & RECOGNITION
- OMISSION, DISTORTION & SUBSTITUTION OF WORDS
- REVERSAL OF WORDS & IMPAIRMENT IN WRITING

1. SPELLING

- WORDS ARE MISPELLED ORALLY & WHILE WRITING

1. ARITHMETIC

- PROBLEM IN UNDERSTANDING MATHEMATICAL CONCEPTS, SIGNS, SYMBOLS, TABLES & COMPUTATION

MOTOR DISORDER

- POOR COORDINATION IN DAILY ACTIVITIES
- MOTOR MILE STONES ARE DELAYED

PREVENTION OF SPECIFIC DEVELOPMENTAL DISORDER



SPEECH & LANGUAGE DISORDER

1. SPEECH AND LANGUAGE THERAPY
2. MEDIATED THERAPY(CHILD & TEACHER)
3. VOCABULARY AND SENTNECE CONSTRUCTION
4. PSYCHOTHERAPY
5. SUPPORTIVE PARENTAL COUNSELLING
6. POSITIVE MODEL



SCHOLOSTIC SKILL DISORDER

1. EFFECTIVE REMEDIATION PROGRAMME TO TEACH THE SYLLABLES,LETTERS & SOUNDS
2. SMALL STRUCTURED TEACHING PROGRAMME
3. SELF OR GROUP INSTRUCTIONAL PROGRAMME
4. TEACHING MATHEMATICS CONCEPTS WITH

MOTOR FUNCTIONING DISORDER

1. SENSORY INTEGRATION PROGRAMME
2. PHYSICAL EDUCATION
3. SOCIAL SKILL PROGRAMME
4. GROUP PROGRAMME
5. PARENT COUNSELLING

TYPES OF EATING DISORDER

PICA

FAILURE TO THRIVE

RUMINATION DISORDER



CAUSES OF EATING DISORDER



PICA

1. REPEATED TRAUMATIC SEPARATION
2. DEPRIVED ORAL NEEDS
3. PATHOGENIC PARENT CHILD RELATIONSHIP
4. MARITAL DISHARMONY
5. MENTAL RETARDATION
6. SIBLING RIVALRY
7. NUTRITIONAL DEFICIENCY
8. WORM INFESTATION
9. NEUROLOGICAL PROBLEMS
10. CULTURAL FACTORS

RUMINATION

HEREDITARY

RUMINATION

DISTURBED
PARENT CHILD
INTERACTION

RUMINATION

PLEASURABLE
ACT

FAILURE TO THRIVE

1. POOR PARENTING: AVOIDING OF CHILD,
2. SEVERE MEDICAL CONDITION: ENDOCRINE DISORDER
3. MATERNAL ILLNESS: Eg: POST PARTUM PSYCHOSIS
4. MARITAL DISHARMONY
5. LACK OF PRIMARY CARE GIVER

DETECTION OF EATING DISORDER



FAILURE TO THRIVE

- PERSISTENT FAILURE TO EAT
- FAILURE TO GAIN WEIGHT
- POVERTY OF SPONTANEOUS ACTIVITY
- LACK OF SOCIAL RESPONSIVITY
- LOOK SAD, JOYLESS, APATHIC, SLEEPINESS
- MALNOURISHED WITH PROTRUDING ABDOMEN

PICA
PERSISTENT
EATING OF
NONNUTRITIVE
SUBSTANCES

PICA
INAPPROPRIATE
TO
DEVELOPMENTAL
LEVEL

RUMINATION DISORDER

- REPEATED REGURGITATION OR RECHewing OF FOOD FOR A PERIOD OF ATLEAST ONE MONTH
- STRAINING & ARCHING THE BACK WITH HEADHELD BACK, WEIGHT LOSS,
- SUCKING MOVEMENT OF THE TONGUE
- IRRITABILITY & HUNGER BETWEEN



PREVENTION OF EATING DISORDER



PICA
- INFANT STIMULATION PROGRAMME
- REMOVAL OF CAUSES
- PSYCHOTHERAPY
- BEHAVIOUR THERAPY

RUMINATION
- DYAD INTERACTION
- PSYCHOTHERAPY
- OBSERVE
- NUTRITIONAL STATUS

FAILURE TO THRIVE
- TREAT ORGANIC CAUSES
- PARENT CHILD INTERACTION
- SUPPORT SERVICES
- COUNSELLING

APPENDIX 7

EVALUATION CRITERIA CHECKLIST FOR VALIDATION OF TOOL ON “KNOWLEDGE AND SKILLS IN IDENTIFICATION OF COMMON MENTAL HEALTH PROBLEMS AMONG SCHOOL CHILDREN”.

Instructions

The expert is requested to go through following evaluation criteria check list prepared for validating the tool for Primary School Teachers on the Knowledge And Skills in Identification of Common Mental Health Problems among school children.

There are 3 columns given for responses and a column for remarks, kindly tick mark in the appropriate column and facilitate your remarks in the remarks column given.

Interpretation of columns

- | | | | |
|----|-----------------------------|---|------------|
| 1. | Meets the criteria | - | Column I |
| 2. | Partially meet the criteria | - | Column II |
| 3. | Does not meet the criteria | - | Column III |

Sl. No.	Criteria	I	II	III	Remarks
I	Objectives				
1.	Formulation of objectives				
1.1	Comprehensive enough for adults in terms of				
1.1.1	Knowledge				
1.1.2	Application				
1.2	Objectives are realistic to achieve				
2	Specific objectives are in terms of learners behavioral outcomes				
2.1	They are realist to achieve				
II	Content				
1	Selection of content				

Sl. No.	Criteria	I	II	III	Remarks
1.1	Content reflects the objectives				
1.2	Content has up to date knowledge				
1.3	Content is comprehensive for the learning needs of primary school teachers				
1.4	Content provides correct information and accurate				
1.5	Content coverage include				
1.5.1	Meaning of common mental problems				
1.5.2	Causes of common mental problems				
1.5.3	Etiology of common mental problems				
1.5.4	Prevention of common mental problems				
1.5.5	Role of a teacher in the identification of common mental problems				
2	Organization and content				
	Organization content follows				
2.1	Logical sequence				
2.2	Continuity				
2.3	Integration				
3.	Presentation of content				
III	Language				
1.	Local language is used in simple and in understandable dialogues				
2.	Technical terms are explained at the level of learners ability				
IV.	Any other suggestions				

APPENDIX 7

LIST OF EXPERTS WHO VALIDATED THE TOOLS

1. **Dr. (Mrs) A. V Raman, M.Sc (N), Ph.D.,**
Director of Nursing Education and Research,
Westfort College of Nursing,
WAHE, Thrissur, Kerala.
2. **Dr. Rajeswari Vaidyanathan, M.Sc (N), Ph.D.,**
Professor cum Principal,
Sri Ramachandra College of Nursing,
Porur, Chennai-600116.
3. **Dr. Jeyaseelan Manickam Devadasan, M.Sc (N), Ph.D.,**
Dean
Annai JKKSA college of Nursing,
Komarapalayam, Namakal 638 183
Tamilnadu.
4. **Dr. Mary Immanuel, M.Sc (N), Ph.D.,**
Former Dean,
CMC College of Nursing,
Christian Medical College, Vellore 632004
5. **Dr Chellarani Vijayakumar, M.Sc (N), Ph.D.,**
Former Dean,
CMC College of Nursing,
Christian Medical College, Vellore 632004
6. **Dr. Karoline Karunagai., M.Sc (N), Ph.D.,**
Vice Principal cum Professor,
Rani Meyyammai College of Nursing,
Annamalai University,
Annamalai Nagar, Chidambaram-608002
Tamil Nadu.
7. **Dr. Anna Goodman, Ph.D.,**
International School of Public Health
London, UK.
8. **Dr. Judith Green, Ph.D.,**
Reader in Sociology of Health,
Head, HSRU,
London School of Hygiene & Tropical Medicine
Keppel Street, London WC1E 7HT

9. **Dr Achira Chatterji, MBBS, MD.,**
Sangath Centre,
Porvorim, Goa, 403521, India
10. **Dr Gauri Divan, MBBS, MD.,**
Developmental Paediatrician,
Sangath Centre, Porvorim, Goa, 403521, India
11. **Sri. Basavaraj G.R, K.S.A.,**
Block Education Officer,
Anekal Taluka,
Anekal, Bangalore, Karnataka.

APPENDIX 8

CERTIFICATION OF VALIDATION

This is to certify that Prof. Esther Shirley Daniel, Ph.D [N] Student [Part time], of Sri Ramachandra Medical College And Research Institute [D.U], Porur, Chennai, is conducting research on, “The Effectiveness Of Structured Educational Modules For Primary School Teachers On The Knowledge And Skills In Identification Of Common Mental Health Problems In Selected Schools of Bangalore District”, and has developed the tools to collect data which have been validated by me.

Date:

Signature

Place:

Name

Designation

Seal.