

ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF SPECIAL NEEDS EDUCATION

**PRIMARY SCHOOL TEACHERS' AWARENESS AND PRACTICE REGARDING
CHILDREN WITH ADHD**

BY
KEBADU MERKEB

JUNE, 2020
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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
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Approval of the Board of Examiners

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ACRONYMS

ADHD- Attention Deficit Hyperactivity Disorder

APA- American Psychiatrist Association

ASCA- American School Counselor Association

DSM-II- Diagnostic and Statistical Manual of Mental Disorders, Second Edition

DSM-III- Diagnostic and Statistical Manual of Mental Disorders, Third Edition

DSM-IV- Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition

DSM-V- Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

ASD- Autism Spectrum Disorder

FASD- Fatal Alcohol Spectrum Disorder

CD-Conduct Disorder

ODD- Oppositional Defiant Disorder

IEP- Individualized Educational Program

USDE- United States Department of Education

CADDRA- the Canadian Attention Deficit hyperactivity Disorder Resource Alliance

SNAP-IV- Swanson, Nolan and Pelham questionnaire, Fourth Edition

TAC- Training and Assistant Center

TPRS- Teachers' and Parents' Rating Scales

ABSTRACT

We can find children with Attention Deficit/ Hyperactivity Disorder in any regular classroom. Most of the time teachers perceive these students as disruptive and punish them. So teachers should have awareness to identify and treat children with ADHD. The right type of teacher with the right type of knowledge and competencies can do better justice to the children with attention problem than teacher with general pedagogy backgrounds. So the aim of this study was to assess primary school teachers' awareness and practice regarding children with attention deficit hyperactivity disorder at selected government primary schools of Akaki Kaliti Sub city. A descriptive survey of 56 teachers was conducted with attempts to describe the level of awareness and practice on teachers regarding children with ADHD through the following dimensions: characteristics, effect of ADHD on school performance, identification, support and the challenges in teaching children with ADHD. In addition 3 school directors, 1 cluster supervisor, 3 guidance and counselors, 2 special needs education professionals, 3 students with ADHD and their parents were selected purposively. Therefore totally 71 participants were included for the study. A 5-point likert scale questionnaire was adopted from available scales. The teachers have lack of awareness and practice regarding children with attention deficit hyperactivity disorder.

CHAPTEERNONE

1. INTRODUCTION

1.1. Background

Teachers have an important role in any educational system and are responsible in the molding of the future generation. Thus a teacher is an artist who molds and shapes the whole personality of children (physically, intellectually, morally etc.). Each child is being taught by a number of teachers who differ in their way of teaching and in the same way the students also vary in their achievements either in one subject or in different subjects taught by different teachers in the classrooms (Srihari, 2007).

Different researchers reported that there is the high incidence of ADHD in school populations and teachers are likely to teach multiple children with ADHD (Legato, 2011). These children have difficulty waiting their turn, talk excessively, often appear not to be listening when being spoken to, and tend to interrupt and intrude on others in games, conversations, and classroom discussions (Daley & Birchwood, 2010, APA,2013,Cruthers,2016). Those who exhibit such behavioral problems in the classroom, whether displaying symptoms of inattention and/or hyperactivity, are at higher risk of poor scholastic achievement and dropping out of school (Alberta, 2006, Loe & Feldman, 2007, Martinussen, Tannock, & Chaban, 2011,). According to the American School Counselor Association (ASCA, 2012) , ADHD may severely affect family relations, cause problems with school staff, impede learning and academic achievement, interfere with peer relationships, and contribute to a student's poor self- concept and low self-esteem. Since ADHD is a disorder that takes place within the school setting either in the classroom and has undesirable effects in terms of academic achievement of students, teachers are often in the front line when it comes to identifying the condition and helping students who suffer from it (Badeleh, 2013, Howard & Linda, 2015). Teachers need to be aware of the symptoms of ADHD in order to be able to identify students affected by it and refer them for help. Before any intervention or treatment, a correct diagnosis should be made (Krowski, 2009).

According to Berri and Hroub (2016), there is a lack of theoretical and empirical studies on school guidance and counseling in the context of the Middle East and North Africa (MENA) region. Moreover, knowledge about students' needs and the tasks of counselors and teachers in this regard requires further development. Studies conducted in the region, for example, Turkey and Iran, have found that teachers lack knowledge about ADHD. In Turkey, for example, 65.5 % of teachers believed that ADHD is a consequence of parental spoiling according to Nur and Kavakci (2010). Another study carried out in Isfahan, Iran, showed that teachers had little knowledge of ADHD, and they were in genuine need of workshops and training in order to enhance their knowledge about how to deal with students with ADHD (Sarraf, Karahmadi, Marasy, & Azhar, 2011).

According to the American School Counselor Association (2012) as cited in Berri & Hroub (2016), school counselors should uphold the rights of students with ADHD to receive multidisciplinary, multimodal, and multifaceted treatment for symptoms and effects of ADHD. If the problems of children with ADHD are unnoticed, unanswered, ignored and such children's needs are not met in regular classrooms or special education within the school; we cannot fulfill the aim of generalization of elementary education and equalization of educational opportunity. It brings scholastic backwardness in these children.

At primary level the teachers should play a vital role in identifying children with ADHD. The right type of teacher with the right type of knowledge and competencies can do better justice to the children with ADHD than teacher with general pedagogy backgrounds. It is important that the teachers require specific abilities to identify children with ADHD, causative factors, development of instructional strategies, media and materials, adopting the developed remedial strategies apart from giving guidance and counseling. The multidimensional roles played by the teacher warrant specific competencies in the teacher to be successful in dealing children with ADHD (Gandhimathi & Eljo, 2010)

Teachers need to understand the causes, developmental course and the common symptoms of ADHD that are displayed in the classroom and should be aware of the effect of specific actions such as punishment and negative reinforcement (Goldstein & Goldstein, 1998 cited in Bruna, 2000). Teachers who are successful in educating children with ADHD use a three-pronged strategy. They begin by identifying the unique needs of the child. For example, the teacher

determines how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects different educational practices associated with academic instruction, behavioral interventions, and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class(U.S. Department of education et al. , 2008)

As reported research from the South African primary school teachers (Perold, Louw, & Kleyhans, 2010) shows that their overall knowledge of ADHD is still poor. For instance, in Zambia many teachers are ignorant of the ADHD conditions of their pupils and students. Therefore they end up punishing such children instead of helping them to manage their affection. Parents of children with ADHD often have very negative experiences to report. Among other things, parents' main concerns include their own lack of understanding ADHD and the general lack of knowledge and skills regarding the best suited ways of supporting children with ADHD through action plans. Therefore, parents are thrust into a kind of feeling of being in the dark and having to cope without support or information.

When it comes to our context, Ethiopia, I thought that there are no adequate studies to show the prevalence of the disorder and existing problems (challenges) children with ADHD present to their parents, teachers and peers and they themselves experience in their academic performance and social interactions. However, as it is stated in the above paragraph, children with ADHD could appear in any classroom of any culture that needs to be identified through assessment research. Hence, it is possible to assume that the above mentioned problems of children may prevalent in Ethiopia. So the main intention of this paper focused on assessing the awareness and practice of primary school teachers regarding attention deficit- hyperactivity disorder in government schools. It tried to provide information about the practice in identifying and supporting children with ADHD and about the challenges face by teachers in teaching those children.

1.2. Statement of the problem

In Ethiopia, except a survey study on the prevalence of persons with behavioral problems which was found to be 2.4% (Tirussew et al., 1995, cited in Tirussew, 2005), the area of behavior problems in general and hyperactivity in particular has not yet been well-researched and known. But there are some students with ADHD facing great difficulties in their educational performance and social interactions with their peers and teachers in some classrooms of Addis Ababa as the researcher observed. Because of lack of knowledge and awareness about these children, teachers, parents and peers perceive these students as "disruptive" and they do not provide them with the necessary educational and social support. The Educational and Training Policy (1994, as cited in Tirussew, 2005) declared that children with special needs should be provided with special educational and training in accordance with their potential and need to promote their holistic development and prepare them for formal education. However, the regular primary school teachers require multidimensional competency and specific abilities to be successful in dealing children with ADHD. The Bachelors of Education program or Teachers Training Program and the findings suggested by different professionals still did not equip the teachers with specific abilities to identify the different types of ADHD problems, causative factors, development of instructional strategies, media and materials and in adapting the developed remedial strategies along with guidance and counseling.

Teachers should go beyond the rigid guidelines to meet the diverse needs of each child. According to Tuija and Timo (ed. 2011) an effective teacher is one who is proficient in planning and implementing teaching programme in addition to making sound decisions regarding remedial strategies geared towards catering for individual differences among learners, but in many African countries, the curriculums are rather rigid and the teachers are compelled to follow the syllabus that has been laid down (pp16). Thus, the guidelines issued by Ministry of Education or Regional Education Bureaus that may guide identification, assessment and intervention is not adequate to help teachers being equipped in the overall problems related to children with ADHD. As a result, many children seem to live with the problem being deprived from desirable developments that come from the social environment, the home and the school.

According to the requirement for the individualized education act (IDEA), schools should provide modifications or adaptations for students with ADHD who are adversely affected in their

educational performance. These adaptations may include: curriculum, classroom organization and management, teaching techniques and study skills, behavior management and parent teacher collaboration. Children with ADHD must be placed in regular education classrooms with necessary aids and services. The needs of some children with ADHD cannot be met only within the confines of a regular education or related services provided in other setting (US. Department of Education, 2003, pp6).

It is difficult to find adequate studies to show the existing problems, research gaps, identification practices and the trends of educational provision and support for children with ADHD in the Ethiopian context. The presence of the above gap, personal observations of some schools and my theoretical knowledge in the area motivated me to conduct this research with a main theme "assessing primary school teachers 'awareness and practice regarding children with attention deficit hyperactivity disorder" with the following four basic research questions:

1. Are there students with ADHD in the selected schools?
2. How teachers perceive children with ADHD?
3. What is the practice in identifying and supporting children with ADHD in the schools?
4. What are the challenges faced by teachers in teaching children with ADHD in the schools?

1.3. Objective of the study

The aim of this study was to assess primary school teachers' awareness and practice regarding children with attention deficit hyperactivity disorder at government schools of Akaki Kaliti Sub city. With this in view, the study was attempted to examine the awareness and practice of teachers by the following specific objectives.

- ❖ To check the presence of children with ADHD at schools
- ❖ To assess the awareness of primary school teachers in identifying and teaching children with attention deficit hyperactivity disorder.
- ❖ To assess the practice in identifying and supporting children with ADHD
- ❖ To investigate the effect of ADHD on school performance
- ❖ To assess the challenges faced by teachers in teaching children with ADHD

1.4. Delimitation of the study

The study was delimited to three primary schools at Akaki kality sub city. It involved collecting data from primary school teachers who have been teaching there. The focus of the study was assessing teachers' awareness and practice regarding ADHD.

1.5. Limitations

The limitations of the study include lack of reliable measures of participants' awareness and practice to offer honest resources. Another limitation was lack of time to conduct observational data. It takes at least six months to make reliable observational data concerning ADHD symptoms and to observe teachers practical strategies in the classroom to manage such behaviors. So due to lack of time and pandemic COVID-19 I tried to observe the symptoms for only a moth.

1.6. Significance of the study

With the above mentioned limitations, the study is believed to have the following significance.

It may infer the selected schools and others on the need for continuing in service training programs to enhance teachers' awareness about ADHD. It may also be used by special needs education experts who needs to assess the teachers' awareness and practice concerning ADHD.

1.7. Organization of the Paper

This paper is organized into six chapters. The first chapter deals with the background of the study, statement of the problem, significance of the study and operational definition of terms. Chapter two concerned on reviewing different literatures and existing researches regarding the definition of ADHD, characteristics of children with ADHD, identification and assessment of children with ADHD, the effect of ADHD on school performance, challenges of teaching children with ADHD and theoretical perspectives on hyperactivity. The third chapter has provided an understanding of the research design employed in the study. Chapter four focuses on the presentation and description of the results of the study in detail. The fifth chapter has presented the discussion of the study. The last chapter deals with the conclusion and recommendations of the study.

1.8. Operational definition of terms

This part of the proposal contains definitions of basic terms used in the designed study.

- **ADHD:** a neurodevelopmental disorder defined by impairing levels of inattention, disorganization, and/or hyperactivity-impulsivity. (APA,2013)
- **Behavior:** in this study it refers to any overt/visible activities and actions of the students with hyperactivity such as his/her overall discipline, learning and social interaction (Alberto &Troutman, 2003).
- **Hyperactivity:** refers a child who is restless and always on the go. (Alberta Education, 2006).
- **Inattention:** refers the behavior in ADHD as wandering off task, lack of persistence, difficulty sustaining focus, and being disorganized without lack of comprehension.
- **Impulsivity:** refers to hasty actions that occur in the moment without forethought and that have high potential for harm to the individual (e.g., darting into the street without looking).
- **Awareness:** teachers' knowledge about the characteristic, identification& support for children with ADHD.

CHAPTER TWO

2. Review of Related Literature

2.1. Definition of ADHD

With the final publication of the DSM-V in 2013, a more accurate characterization and definition of the experience of ADHD was presented. By adapting the criteria for adults, DSM-V aims to ensure that children with ADHD can continue to receive care throughout their lives if needed. According to the American Psychiatric Association (2013) in the DSM-5:

ADHD is a neurodevelopmental disorder defined by impairing levels of inattention, disorganization, and hyperactivity-impulsivity. Inattention and disorganization entail inability to stay on task, seeming not to listen, and losing materials, at levels that are inconsistent with age or developmental level. Hyperactivity-impulsivity entails over activity, fidgeting, inability to stay seated, intruding into other people's activities, and inability to wait symptoms that are excessive for age or developmental level. In childhood, ADHD frequently overlaps with disorders that are often considered to be "externalizing disorders," such as oppositional defiant disorder and conduct disorder. ADHD often persists into adulthood, within resultant impairments of social, academic and occupational functioning (APA, 2013 p32).

Generally, the Diagnostic and Statistical Manual (DSM- V), criteria for diagnosing ADHD list three types of ADHD and the accompanying characteristics (APA, 2013, William& Mary T/TAC, 2017p2):

1. **Predominantly inattentive type:** The student may: submit inaccurate or incomplete work, have difficulty attending to conversations, activities, or tasks, be easily distracted, have difficulty following directions, frequently lose materials, and/or have difficulty organizing tasks and materials.
2. **Predominantly hyperactive/impulsive type:** The student may: appear to be in constant motion, frequently fidget or move in his or her seat, become restless during quiet activities, leave his or her seat when expected to remain seated, interrupt others and classroom activities, talk excessively, and fail to follow classroom procedures (e.g., blurt out answers without raising hand).

3. **Combined type:** The student may exhibit symptoms that include behaviors from both categories above.

National Institute for Health & Clinical Excellence (2009) and others define ADHD in the following ways as cited in Ajay& Jane (2014p.123):

ADHD is recognized as a common childhood psychiatric disorder and has a strong genetic, neuro-biologic, and neurochemical basis. It is characterized by symptoms of inattention and/or impulsivity and hyperactivity which can significantly impact many aspects of behavior and performance, both at school and at home (Faraone et al., 2003 Biederman et al., 2009, Schubiner, 2008).

Barkley (2018) defines ADHD as follows:

Attention deficit-hyperactivity disorder (ADHD) is a neuropsychiatric disorder of childhood which is associated with inattention, impulsivity and hyperactivity. It is estimated that 3 to 7 percent of school- aged children are affected by ADHD. Symptoms of ADHD tend to impact various aspects of the individual's functioning and development (Zahra et al2018, pp47)

Similarly, Visser, et al. (2014) and Brown (2013) as cited in National Resource Center on ADHD (2007) define ADHD as:

Attention deficit hyperactivity disorder is neurodevelopmental disorder affecting 11 percent of school age children. Symptoms continue in to adulthood in more than three quarters of cases. ADHD is characterized by developmentally inappropriate level of inattention, impulsivity and hyperactivity (National Resource Center on ADHD 2007p.1).

Another definition by Barkley (1990) as cited in Bekele (2000) similarly describes the nature of ADHD, and also emphasizes how it is distinguishable from other psychiatric, developmental, and neurological disorders. According to the description, ADHD is a developmental disorder characterized by developmentally inappropriate degrees of inattention, hyperactivity and impulsivity. These problems often arise in early childhood and are relatively chronic in nature and are not readily accounted for on the basis of gross neurological, sensory, language, motor impairment, mental retardation or severe emotional disturbance. This description proved that the

problems of ADHD are typically associated with deficits in rule governed behavior and in maintaining a consistent pattern of work performance over time (p.87).

Alberta Education defined ADHD as: a neurobiological condition that can cause inattention, hyperactivity and/or impulsivity, along with a number of related difficulties, inappropriate for an individual's age. (pp2)

According to the report from U.S Department of education (2003 &2007) attention-deficit/hyperactivity disorder is a neurobehavioral disorder that typically begins in childhood and often persists into adulthood. ADHD is characterized by developmentally inappropriate levels of inattention and hyperactivity resulting in functional impairment in academic, family, and social settings. ADHD is the most commonly diagnosed neurobehavioral disorder of childhood, with previous reports documenting increasing trends in prevalence during the past decade and increases in ADHD medication use (Howard and Linda, 2015).

Based on this definition, at least six symptoms from either (or both) the inattention group of criteria and the hyperactivity and impulsivity criteria must be displayed in children, while five symptoms must present in older adolescents and adults (over age 17 years).

According to Centers for Disease Control and Prevention (2015) and the American Psychiatric Association (2013), ADHD is one of the most commonly diagnosed conditions of children. The diagnostic term attention deficit/hyperactivity disorder (ADHD) refers to individuals who display patterns of inattention, impulsivity, and overactive behavior that interfere with daily functioning. In order for a student to be diagnosed with ADHD, symptoms must appear before age 12 and be exhibited across at least two settings. They must also have adverse effects on academic performance, occupational success, or social-emotional development (APA, 2013, U.S Department of Education, 2008, Howard and Linda, 2015).

2.2. Characteristics of Children with ADHD

2.2.1. Behavioral characteristics

As reported in APA (2013), attention-deficit, hyperactivity disorder (ADHD) is characterized by a persistent pattern of inattention, hyperactivity and impulsivity that interferes with functioning or development. Based on this description, children with ADHD have the following behavior characteristics: Inattention manifests behaviorally in ADHD as wandering off task, lack of

persistence, difficulty sustaining focus, and being disorganized without lack of comprehension. Hyperactivity refers to excessive motor activity (such as a child running about) when it is not appropriate, or excessive fidgeting, tapping, or talkativeness. In adults, hyperactivity may manifest as extreme restlessness or wearing others out with their activity. Impulsivity refers to hasty actions that occur in the moment without forethought and that have high potential for harm to the individual (e.g., darting into the street without looking). Impulsivity may reflect a desire for immediate rewards or an inability to delay gratification. Impulsive behaviors may manifest as social intrusiveness (e.g., interrupting others excessively) and/or as making important decisions without consideration of long-term consequences (e.g., taking a job without adequate information).

ADHD begins in childhood. The requirement that several symptoms be present before age 12 years conveys the importance of a substantial clinical presentation during childhood. At the same time, an earlier age at onset is not specified because of difficulties in establishing precise childhood onset retrospectively. Adult recall of childhood symptoms tends to be unreliable, and it is beneficial to obtain ancillary information. The symptoms of the disorder must be present in more than one setting, may be at home and school or work. Confirmation of substantial symptoms across settings typically cannot be done accurately without consulting informants who have seen the individual in those settings. Typically, symptoms vary depending on context within a given setting. Signs of the disorder may be minimal or absent when the individual is receiving frequent rewards for appropriate behavior (APA, 2013, P.61)

According to American Psychiatric Association (APA ,1994), in its fourth edition of the Diagnostic Statistical Manual of Mental Disorders (DSM-IV) as cited in U.S.Department of education (2006) ADHD can be defined by behaviors exhibited. Individuals with ADHD exhibit combinations of the following behaviors: Fidgeting with hands or feet or squirming in their seat (adolescents with ADHD may appear restless);Difficulty remaining seated when required to do so; Difficulty sustaining attention and waiting for a turn in tasks, games, or group situations; Suddenly answer questions before the questions have been completed; Difficulty following through on instructions and in organizing tasks; Shifting from one unfinished activity to another; Failing to give close attention to details and avoiding careless mistakes; Losing things necessary

for tasks or activities; Difficulty in listening to others without being distracted or interrupting; Wide ranges in mood swings; and Great difficulty in delaying gratification(pp2).

Children with ADHD show different combinations of these behaviors and the behaviors can be classified into two main categories: poor sustained attention and hyperactivity-impulsiveness. American Psychiatric Association in the DSM-IV as cited in Barkley, (1997): describe three subtypes of ADHD: predominantly inattentive, predominantly hyperactive-impulsive, and combined types. For instance, children with ADHD, without hyperactivity and impulsivity, do not show excessive activities or fidgeting but instead may daydream, act lethargic or restless, and frequently do not finish their academic work. Not all of these behaviors appear in all situations. A child with ADHD may be able to focus when he or she is receiving frequent reinforcement or is under very strict control. The ability to focus is also common in new settings or while interacting one-on-one. While other children may occasionally show some signs of these behaviors, in children with ADHD the symptoms are more frequent and more severe than in other children of the same age.

2.2.2. Associated Characteristics /features

Children with ADHD often have mild delays in language, motor, or social development. Other associated features may include low frustration tolerance, irritability, or mood lability. Even in the absence of a specific learning disorder, academic or work performance is often impaired. Inattentive behavior is associated with various underlying cognitive processes, and individuals with ADHD may exhibit cognitive problems on tests of attention, executive function, or memory, although these tests are not sufficiently sensitive or specific to serve as diagnostic indices. Children with ADHD under early adulthood are at risk of suicide attempt, when the problem comorbid with mood, conduct, or substance use disorders (APA, 2013, Bibi, L. et al 2014).

2.2.3. Developmental Characteristics

In toddlers many parents first observe excessive motor activity, but symptoms are difficult to distinguish from highly variable normative behaviors before age 4 years. ADHD is most often identified during elementary school years, and inattention becomes more prominent and impairing. The disorder is relatively stable through early adolescence, but some individuals have a worsened course with development of antisocial behaviors. In most individuals with ADHD,

symptoms of motoric hyperactivity become less obvious in adolescence and adulthood, but difficulties with restlessness, inattention, poor planning, and impulsivity persist. A substantial proportion of children with ADHD remain relatively impaired into adulthood. In preschool, the main manifestation is hyperactivity. Inattention becomes more prominent during elementary school. During adolescence, signs of hyperactivity (e.g., running and climbing) are less common and may be confined to fidgetiness or an inner feeling of jitteriness, restlessness, or impatience. In adulthood, along with inattention and restlessness, impulsivity may remain problematic even when hyperactivity has diminished (APA, 2013, pp.62).

2.2.4. Academic Characteristics

The Alberta Education (2006) reported that students with AD/HD frequently struggle in academic areas. About 30 to 50 percent¹ of these students also have learning disabilities. Even those without learning disabilities frequently experience difficulties in reading, writing and mathematics because of difficulties related to attention and short-term memory (pp2)..

Levy and Hay (2001) indicated that Characteristics of inattention, hyperactivity and impulsivity in the classroom include difficulties in: keeping track of personal belongings and school supplies , getting started on tasks , sitting still and focusing attention on the task at hand , regulating attention to tasks and to people , organizing or following through on instructions, assignments and classroom duties , organizing and managing time , planning for and completing written assignments (both short-term and long-term) , working independently (e.g., completing paper-and-pencil tasks at desk) ,self-monitoring , maintaining consistent quality and quantity of work from day to day, and at different times in the same day , participating in classroom discussions (e.g., waiting turns, staying on topic, listening to others) , dealing with change and transitions, including moving from one activity to the next during the school day and moving from grade to grade or from school to school.

Supporting this study by (Loe & Feldman, 2007) shows that children with ADHD show significant academic underachievement, poor academic performance, and educational problems. In terms of activity limitations, children with ADHD score significantly lower on reading and arithmetic achievement tests than controls. In terms of restrictions in social participation, children with ADHD show increases in repeated grades, use of remedial academic services, and placement in special education classes compared with controls. Children with ADHD are more

likely to be expelled, suspended, or repeat a grade compared with controls (Journal of Pediatric Psychology pp644).

2.3. The Effect of ADHD on School Performance

Based on the Diagnostic and Statistical Manual for Mental disorder (DSM-5) criteria of APA(2013), ADHD is associated with reduced school performance and academic attainment, social rejection, and, in adults, poorer occupational performance, attainment, attendance, and higher probability of unemployment as well as elevated interpersonal conflict. Children with ADHD are significantly more likely to develop conduct disorder in adolescence and antisocial personality disorder in adulthood, consequently increasing the likelihood for substance use disorders and incarceration. The risk of subsequent substance use disorders is elevated, especially when conduct disorder or antisocial personality disorder develops. Inadequate or variable self-application to tasks that require sustained effort is often interpreted by others as laziness, irresponsibility, or failure to cooperate. Family relationships may be characterized by discord and negative interactions. Peer relationships are often disrupted by peer rejection, neglect, or teasing of the individual with ADHD. Academic deficits, school-related problems, and peer neglect tend to be most associated with elevated symptoms of inattention, whereas peer rejection and, to a lesser extent, accidental injury are most salient with marked symptoms of hyperactivity or impulsivity (pp.63).

Students with ADHD have challenging in their school. They usually are identified only after consistently demonstrating a failure to understand or follow rules or to complete required tasks, frequent classroom disruptions and poor academic performance. (Alberta Education, 2006, U.S Department of Education et.al, 2008, William & Mary T/TAC, 2015)

According to the report in the U.S Department of Education (2003) studies found that students with ADHD, compared to students without ADHD, had persistent academic difficulties manifested in: lower average marks, more failed grades, more expulsions, increased dropout rates, and a lower rate of college undergraduate completion (Weiss & Hechtman as cited in Johnston, 2002; Ingersoll, 1988). The disruptive behaviors sometimes make students with ADHD more susceptible to suspensions and expulsions. A study by Barkley and colleagues (1990) reported that 46 percent of their student study group with ADHD had been suspended and

11 percent had been expelled. Supporting this (Zentall, 1993) emphasized that the core symptoms of inattention, hyperactivity, and impulsivity make meeting the daily rigors of school challenging. Difficulty sustaining attention to a task may contribute to missing important details in assignments, daydreaming during lectures and other activities, and difficulty organizing assignments. Hyperactivity may be expressed in either verbal or physical disruptions in class. Impulsivity may lead to careless errors, responding to questions without fully formulating the best answers, and only attending to activities that are entertaining or novel. To sum up, students with ADHD may experience more problems with school performance than their nondisabled peers (pp13).

Studies of outcome in children diagnosed with ADHD suffer from a potentially serious logical problem: circularity. The clinical definition of ADHD in the DSM-IV requires the presence of functional impairment, typically defined in terms of behavior and performance at home and school. School problems are almost always present to make the diagnosis and therefore are more likely to be present at follow-up. Another problem in the use of clinic-referred samples is the selection bias in who gets referred to diagnostic clinics. One research strategy to complement the longitudinal studies of clinic-referred samples and avoid these problems is to evaluate children from community-based samples who demonstrate symptoms of ADHD but who have not necessarily been formally diagnosed with ADHD. In general, these studies find that children with symptoms of ADHD and without formal diagnoses also have adverse outcomes (Loe & Feldman, 2007pp447).

2.4. Assessment and Identification of Children with ADHD

2.4.1. Assessment of Children with ADHD

The purpose of assessment is to determine whether or not a child should be diagnosed with ADHD in the absence or presence of other childhood psychiatric disorders and to address the academic and social problems that have been noticed through the use of appropriate intervention plans. Following a teacher's referral of a child showing ADHD-related symptoms, the following stages should be considered: The first stage of assessment is to obtain the teacher's ratings of the child's behavior. The second stage is using multiple assessment methods. The psychologist then intervenes and interviews the child, the parents, and the teacher in order to prepare an intervention and treatment plan. During the third phase of assessment, the results of the multi-

method evaluation are interpreted. Finally, an intervention and treatment plan is devised during the fourth stage of the assessment (Kleynhans, 2005, Berri & Hroub, 2016).

Teachers play a major role in referring children for assessment since spend most of their time with students, whether in the classroom or during free time. They are expected to complete behavior-rating scales after referring a child and are the source of detailed information about the referred child required by the psychologist. Such information includes: the referred child's academic performance, social relations, the difficulties that the child faces, and the strategies that the teacher uses to address such difficulties. Teachers also need to review the DSM-V diagnostic criteria with the psychologist in order to match their own observations with such criteria. Teachers' collaboration with parents and specialists is fundamental to the success of the assessment process so that good referrals and accurate diagnosis may be made (Kleynhans, 2005, Alberta Education, 2006, Berri& Hroub, 2016)

Different researchers reported that assessment and treatment of the comorbid disorder is often important in addressing the ADHD symptomology. Thus, some of the comorbid conditions, such as ADHD and Tourette's syndrome or ADHD and CD, may lead to specific subgroups of ADHD characterized by differences in natural histories, underlying etiological factors, and responses to treatment (Cantwell, 1996). So comorbidity should be given greater consideration in the design of future studies of ADHD in children and adolescents, particularly if the presence of comorbid disorders (or symptoms) affects the short and long-term response to treatment (Jensen, Martin, & Cantwell, 1997).

The study from research works admitted that early and accurate identification of ADHD in children is necessary to provide for their specific educational needs (Fell & Pierce, 1995; Montague, McKinney, & Hocutt, 1994, Bekele, 2000). Therefore, teachers' expert observational skills and familiarity with age appropriate norms for behavior can assist parents and medical specialists in the process of diagnosis (including identification and assessment) and treatment of ADHD. Teachers also have the opportunity to experience children's' response to medication in the classroom, so clinicians should use teachers' rating scales for diagnosis and determination of response to treatment. But, medical evaluations are often based on subjective parental reports (Gadow, 1986). Even when teachers' rating scales are used, Jerome et al. (1994) cautioned that response bias to the questionnaire can lead to significant variation in behavioral observations

between teachers, as well as with individual teachers over time. Consequently, these authors recommended obtaining information on individual teachers' knowledge and attitudes regarding ADHD.

Researcher found that teachers' knowledge about ADHD is inter-related with their general attitude towards the condition. For instance some teachers hold a negative view of working with children that display disruptive behavior disorders, such as ADHD (Algozzine, 1980; Coleman & Gilliam, 1983). In line with this research suggests that such a negative view might be improved by exposing those teachers to up-to-date information, regarding the condition. Determining what teachers believe and know about ADHD is a precondition in preparing teachers to better serve those students with ADHD (Jerome et al., 1994). Such information can assist those responsible for delivering in-service training to practicing teachers and is for the training of students studying education, in order to provide them with more appropriate professional preparation to address the needs of students with ADHD in their classrooms (Jerome et al., 1999).

In different literature it is admitted that teacher observations are an essential resource in the clinical evaluation of ADHD due to the reason that ADHD symptoms are usually well developed by school age and clearly and consistently observed in the school environment (Barkley, 1990). Children should be observed inside and outside the classroom, to determine the pervasiveness of symptoms. For example, students with ADHD may appear normal on the playground, but may evidence significant intentional or activity levels within the classroom (Reeve, 1990). If children are on medication, observations should include periods when the child is taking medication, and periods without medication, in order to monitor the degree of behavioral change (Montague et al., 1994).

As stated in Alberta Education (2006), usually, referrals go beyond an investigation of AD/HD and consider additional difficulties, such as underachievement or behavior problems. There are many potential reasons why students may experience difficulties with inattention, hyperactivity and impulsivity AD/HD is not always the explanation. Coexisting conditions that can result in behaviors similar to the symptoms of AD/HD may include: underachievement at school due to learning disabilities; attention lapses caused by petit mal seizures; middle ear infections that cause intermittent hearing problems; disruptive or unresponsive behavior due to anxiety or depression; school work that is too hard or too easy; insufficient sleep on an ongoing basis; poor

nutrition; significant personal or family disruption; situations of abuse or neglect; drug and alcohol use; medical, neurological or psychiatric conditions (e.g., hyperthyroid, allergies, diabetes, fetal alcohol spectrum disorder, bipolar disorder).

Other disorders frequently coexist with AD/HD. Therefore, additional assessment information can be helpful in determining whether or not AD/HD-type symptoms are the product of another disorder. Diagnostic tests such as cognitive assessments, academic achievement tests or depression inventories may be used for the assessment of other coexisting conditions such as learning disabilities, depression or anxiety. Academic achievement information is also valuable in understanding the impact of AD/HD symptoms on learning and school performance. During the assessment, psychologists also take opportunities to observe directly the student's approach to tasks. The information gathered through interviews, observations, rating scales and psycho-educational testing is reviewed to establish whether the onset, severity and pervasiveness of the symptoms meet the DSM-IV criteria for ADHD, and to rule out other medical, psychological or environmental factors that might be primary causes of the child's current difficulties. A diagnosis includes identification of the subtype predominantly inattentive, predominantly hyperactive or coeducational planning (APA, 2013, Alberta Education 2006, Carruthers, 2016).

2.4.2. Identifying students with AD/HD

The observations of parents and teachers are keys to accurately identifying students who are experiencing difficulties that may be attributed to AD/HD. Initial concerns may come from parents, teachers or students themselves. While AD/HD is a lifelong condition, the negative impact of the symptoms may occur at different ages and thus referrals for assessment and diagnosis may occur at any time during an individual's life span. Transition times, such as moving from one grade level to another, may be challenging for some students and negative AD/HD characteristics may become more pronounced at these times (Alberta Education, 2006).

Preschool years

Parents may be concerned about their child's extremely high activity level in comparison to siblings or to other children of the same age. They may fear for their child's safety and observe that their child's behavior often puts him or her at risk of harm. They may find their child difficult to manage and to discipline or suspect the child has a hearing difficulty. Toddlers and

preschoolers, who show characteristics of ADHD, may be normal for their age or developmental stage. These behaviors must be exhibited to an abnormal degree to warrant identification as ADHD. Even with older children, other factors such as environmental influences and other can produce behaviors resembling ADHD (APA, 2013, Carruthers, L., 2016).

Elementary school years

Teachers and parents may have concerns about a child's underachievement, poor productivity, inefficient approach to tasks and behavior difficulties. For example, the child may seem to have sufficient skills, but has significant difficulty starting and completing assigned work. The child may socialize at inappropriate times, and be disorganized with materials and assignments. There are often concerns about peer relationships, particularly finding and keeping friends. At home, parent-child conflicts may arise over follow-through of chores such as keeping his or her room tidy (Alberta Education, 2006, Barry, & Messer, 2003, Adelman & Taylor, 2015 pp43).

Junior and senior high school years

Students referred during these years may have been able to cope with the demands of elementary school with support from home and school. There may have been some difficulties from earlier years, but the student was not disruptive and managed to keep up with school demands. Now, there are increases in the expectation for greater independence and in the need to juggle multiple demands. The volume of work, particularly of written output, increases and the student struggles. Particular difficulties include dealing with deadlines, coping with complex assignments and handling new social situations (Alberta Education, 2006 pp8).

Adelman and Taylor (2015) reported that in the school setting students with ADHD tend to have following problems that teachers should observe carefully: They demand attention by talking out of turn or moving around the room. They have trouble following instructions, especially when they're presented in a list. They often forget to write down homework assignments, do them, or bring completed work to school. They often lack fine motor control, which makes note-taking difficult and handwriting a trial to read. They often have difficulty with operations that require ordered steps, such as long division or solving equations. They usually need direct supervision in long-term projects. They don't pull their weight during group work and may even keep a group from accomplishing its task (p27).

Adult years

Adults may seek an explanation for their many years of struggle. They may be experiencing challenges in their personal relationships, post-secondary education and the work place (Alberta Education, 2006 pp8)e.

Based on the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria of (APA, 1994) as cited in the report of U.S. Department of Education (2003), a person must exhibit several characteristics to be clinically diagnosed as having ADHD and should consider the following (pp3-4):

- **Severity:** the behavior in question must occur more frequently in the child than in other children at the same developmental stage.
- **Early onset:** at least some of the symptoms must have been present prior to age 7.
- **Duration:** the symptoms must also have been present for at least 6 months prior to the evaluation.
- **Impact:** the symptoms must have a negative impact on the child's academic or social life.
- **Settings;** the symptoms must be present in multiple settings

As reported in the fifth edition of the Diagnostic Statistical Manual of Mental Disorders (DSM-V) criteria for ADHD of the American Psychiatric Association (APA,2013), People with ADHD show a persistent pattern of inattention, hyperactivity and impulsivity that interferes with functioning or development and can be identified based on the following diagnostic criteria:

1. Diagnostic criteria for inattention

Six or more symptoms of inattention for children up to age 16, or five or more for adolescents 17 and older and adults; symptoms of inattention have been present for at least 6 months, and they are inappropriate for developmental level: Often fails to give close attention to details or makes careless mistakes; Often has difficulty holding attention on tasks or play activities; Often does not seem to listen when spoken to directly; Often does not follow through on instructions and fails to finish school work ,chores or other duties in the work place (e.g. loses focus and side tracked) ;Often have difficulty organizing tasks and activities; Often dislikes doing tasks that

require strong mental effort over a long period of time; Often loses things necessary for tasks such as school materials ;Often easily distracted and often forgetful in daily activities.

1. Diagnostic criteria for Hyperactivity and Impulsivity

Six or more symptoms of hyperactivity-impulsivity for children up to age 16, or five or more for adolescents 17 and older and adults; symptoms of hyperactivity-impulsivity have been present for at least six months to an extent that is disruptive and inappropriate for the person's developmental level: Often keep moving hands or feet, or restless in seat; Often leaves seat when remaining seated is expected; Often runs about; Often have difficulty to play leisure activities quietly; Often acting as if "driven by a motor"; Often talks excessively; Often blurts out an answer before a question has been completed (suddenly answer questions);Often has difficulty waiting turn and often interrupts on others especially faced challenge in conversational games.

In addition, the following conditions must be met: In first the inattentive, hyperactive or impulsive symptoms were present before age 12 years. Second symptoms are present in two or more setting, may be at home and school or work; with friends or relatives and in in other activities. Third the symptoms interfere with, or reduce the quality of, social, school, or work functioning. Fourth the symptoms do not happen only during the course other psychotic disorders such as schizophrenia or another. Lastly the symptoms are not better explained by other mental disorder like: Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder.

Based on the types of symptoms, three kinds (presentations) of ADHD can occur:

1. Combined Presentation: if enough symptoms of both criteria inattention and hyperactivity-impulsivity were present for the past 6 months
2. Predominantly Inattentive Presentation: if enough symptoms of inattention, but not hyperactivity-impulsivity, were present for the past six months
3. Predominantly Hyperactive-Impulsive Presentation: if enough symptoms of hyperactivity-impulsivity but not inattention were present for the past six months.

The presentation may change over time since symptoms can change over time.

2.5. Supporting Children with ADHD

To make the children with ADHD be successful in school, teachers and parents should have knowledge about ADHD and must build collaborative and sustained teamwork (Barkley, 1990; Dunne et al., 1997). Recent studies proved that a multi-modal approach based on collaboration among stake holders is essential for early and accurate identification of children with ADHD (Barkley, 1997; Fell & Pierce, 1995; Montague, et al., 1994; Sloan, et al., 1999).

Teachers need to know the characteristic and the common symptoms of ADHD developmental that are displayed in the classroom. Teachers should also be aware of the effect of specific actions, such as punishment and negative reinforcement, on children with ADHD (Goldstein & Goldstein, 1998, Adelman& Taylor, 2015). This is an important prerequisite for teachers who wish to adopt behavioral therapy, which involves a system of positive and negative reinforcements as a means of helping children with ADHD and are applied to bring about the targeted behavior (McFarland et al., 1995). Where behavior therapy is used in treatment plans for children diagnosed as ADHD, it should be individualized according to the pattern of target symptoms (Dunne et al., 1997). Behavioral strategies provide teachers with a means of regulating behavior to improve academic performance in children with ADHD (Gardill et al., 1996). But, these strategies are often limited in their effectiveness since teachers and parents are unable or unwilling, to persist with such demanding programs over a long period of time (McFarland et al., 1995).

Teachers must be familiar with different methods and strategies appropriate for students with ADHD. Such strategies include both behavioral and academic instructional strategies and interventions (Grynkewich, 1996). Teachers must be well professional to apply classroom strategies that can be adopted to promote success in students with ADHD. For instance the teacher should provide individualized instruction, frequently monitor and check students 'work, provide interesting and interactive lessons (Gardill et al., 1996; Pfeiffer & Barkley, 1990). In addition, teachers must have the skill to effectively manage the problem behavior, including symptoms of ADHD (Brophy and McCaslin ,1992). Such requirements include a willingness to work personally with problem students, confidence in the ability to effect student improvement, and planning for future problem prevention or for remedial strategies. Other important qualities

for teaching students that have special needs include acceptance, warmth, tolerance, and a positive attitude (McCauley & Johnson, 1993).

In order for a student to be diagnosed with ADHD, symptoms must appear before age 12 and be exhibited across at least two settings. They must also have adverse effects on academic performance, occupational success, or social-emotional development. To add to the complexity of the diagnosis, children with ADHD are likely to have co-existing emotional, behavioral, developmental, learning, or physical conditions. As a result of the behaviors listed above, students with ADHD are at greater risk of academic difficulties, social/emotional issues, and limited educational outcomes (APA, 2013, Wolraich & DuPaul, 2010).

Literature reported that a correlational relationship exists between teachers' knowledge about ADHD and teachers' choice of classroom-behavior management strategy. Therefore, it is imperative that teachers' have knowledge of effective behavior management strategies for shaping negative ADHD behaviors in an inclusive classroom for optimal student academic performance and outcomes (Blotnicky-Gallant et al., 2014; Sherman, Rasmussen, & Baydala, 2008, Arthur N.2016) .

Previous research has found that teachers' knowledge about their students' ADHD characteristics influenced the teachers' responses to the students' classroom behavioral presentations (Blotnicky Gallant et al., 2014; Sherman, Rasmussen, & Baydala, 2008). The research suggested that teachers' use more negative and disciplinary consequences, such as referral, removal from class, manual labor, and corporal punishment with ADHD behaviors than other more effective in-class behavioral management strategies (Ergün, 2014; Ohan , Cormier, Hepp, Visser, & Strain, 2008). Use of these punitive strategies for shaping ADHD behaviors leads to increased frequency and intensity of the negative behaviors (Kaufman &Brigham, 2009), student resistance and disengagement, and truancy and chronically impaired externalizing and internalizing behaviors (Sullivan et al., 2014; Zyngier, 2007).pp43

Teachers who are successful in educating children with ADHD use a three-pronged strategy. They begin by identifying the unique needs of the child. For example, the teacher determines how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects different educational practices associated with academic instruction, behavioral interventions,

and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class. The U.S. Department of Education (2008, pp4) indicated the following three-pronged strategies:

1. **Evaluate the child's individual needs and strengths.** Assess the unique educational needs and strengths of a child with ADHD in the class. Working with a multidisciplinary team and the child's parents, consider both academic and behavioral needs, using formal diagnostic assessments and informal classroom observations. Assessments, such as learning style inventories, can be used to determine children's strengths and enable instruction to build on their existing abilities. The settings and contexts in which challenging behaviors occur should be considered in the evaluation.
2. **Select appropriate instructional practices.** Determine which instructional practices will meet the academic and behavioral needs identified for the child. Select practices that fit the content, are age appropriate, and gain the attention of the child.
3. **For children receiving special education services, integrate appropriate practices within an IEP.** In consultation with other educators and parents, an IEP should be created to reflect annual goals and the special education related services, along with supplementary aids and services necessary for attaining those goals. Plan how to integrate the educational activities provided to other children in your class with those selected for the child with ADHD.

Because no two children with ADHD are alike, it is important to keep in mind that no single educational program, practice, or setting will be best for all children. The following are the suggested Successful integrated implementation programs for children with ADHD.

2.5.1. The supportive (Intervention) Goals

School interventions should include a team approach across multiple settings, consisting of both preventive and intervention strategies. Interventions must be based upon assessment data that includes information about the student's strengths and needs as well as the environmental conditions in which her characteristics of ADHD occur. Progress monitoring and strategy adjustments are critical to the success of any intervention plan (Wolraich & DuPaul, 2010).

2.5.2. Academic Interventions

The first step in creating classroom supports for students with ADHD involves formal and informal assessment to know the students' strengths and needs. This includes collaboration among educational professionals and the students' families. If a student is not responsive to behavioral strategies and interventions, more intensive interventions, such as functional behavior assessment and behavior intervention plans, should be considered. No one intervention is universally effective for all students with ADHD. A combination of research-based and promising practices is recommended. Several of these practices are: giving directions, written assignments, deconstructing tasks, and organizational supports which include the following; assignment notebook, color-coded folders, and homework partners, clean out dates, extra books, use of calendars and checklist of homework supplies.

According to the recent studies children exhibiting ADHD behavioral characteristics experience academic problems beginning in the elementary years. While research showed that most of these children possess inherent capabilities for academic knowledge, a negative correlation existed between their performance and skill levels, including poor test performance and academic achievement scores (Langberg, et al., 2011; Schultz, Evans, Serpell, 2009; Wolraich & Dupaul, 2010, Arthur,N.2016).

In addition ,pedagogical approaches to inclusive classrooms necessitates the need for teachers to be masterful and to deliver quality and differential instruction to accommodate the students whose disruptive and off-task behaviors impede learning in the classroom (Martinussen, Tannock & Chaban, 2011). Behavior that disrupts classroom flow constricts knowledge gain and academic outcomes. Thus, in order to maximize student commitment and augment the chances of academic success, teachers must possess effective classroom management skills and rely on classroom behavioral interventions (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011).

Accordingly, researchers have reported that teacher training relating to ADHD and other professional development involving classroom management skills were inevitable, and had a higher correlation with teachers' effectiveness and success of inclusive environment (Aguar et al., 2012; Causton-Theoharis, 2009; Dupaul et al., 2006; DuPaul et al., 2011; Graham-Day, Gardner, & Hsin, 2014; Kozik, Cooney, Vinciguerra, Gradel, & Black, 2009). However, studies

have shown that many teachers do not possess adequate training in classroom management, especially inclusive classroom practices, prior to engaging in an in-service teaching career. These teachers experience struggles with classroom management along with their pedagogical responsibilities and often need continued in-service training to support and improve their knowledge about ADHD, and consequently, their classroom-management skills (Roache, J. E., & Lewis, R. 2011; Romi, Lewis, Roache, & Riley, 2011; Roorda, Koomen, Spilt, & Oort, 2011)

ADHD conditions are correlated with academic impairment and students with ADHD needs effective academic intervention to improve their academic skills. Academic intervention includes teacher-mediated instruction, peer-tutoring, modification of student curriculum, and computer-mediated instruction. Researches indicated that computer-mediated instruction in mathematics and reading provided similar responsive effects on on-task behaviors and academic performance as that achieved in seatwork condition. As well, the teacher's modification of teaching style to accommodate students' specific academic deficit and learning style has been effective across age groups and disability populations. Modification of academic curriculum, including seating arrangements, tasks, and instructional presentation may improve academic performances for students with ADHD (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011, Arthur 2016).

Peer tutoring is another aspect of academic intervention found effective in shaping behavior, social skills, and academic performance Peer tutoring consists of a pair of students working collaboratively on a pedagogic assignment wherein one learner offers help and facilitates learning for the other. Through peer tutoring, the student facilitator models positive academic behaviors by providing academic instruction and feedback to enhance competent behavior and confidence, and to improve social and collaborative skills in the one another (Bowman-Perrott, 2009).

2.5.3. Classroom Considerations

The culture of the classroom can either support or create barriers to student success (Piffner, 2011). Factors that foster attention, positive behavior, and academic and social success include establishing positive relationships with students, adopting classroom management techniques, and creating a physical arrangement that facilitates learning.

It is often a positive relationship with one teacher that facilitates school success for a student with ADHD (Piffner, 2011). When teachers connect with students and appreciate their unique skills and interests, students are more likely to strive for achievement and positively respond to classroom rules and procedures.

When using a proactive approach to classroom management, teachers support all students and create conditions that prepare them for learning (Piffner, 2011). Some strategies for positive management include clear directions, meaningful feedback, and opportunities for collaboration with peers. William & Mary Training and Technical Assistant Center (2017) suggested the following additional strategies (pp5&6):

1. **Opportunities to Respond:** Students with ADHD often have the most trouble attending during drill-and-practice assignments because of the repetitive nature of the tasks. Peer-mediated approaches such as those enumerated below are particularly effective for students with ADHD in such cases, because they increase students' opportunities for engagement and active learning (Piffner, 2011). These included: peer tutoring, cooperative learning, sharing strategies, partner reading, self-correction opportunities, computer games, student-created reviews and transition buddies:. Further, verbal or nonverbal teacher cues signaling upcoming transitions help prepare students for changes in activities or lessons.
2. **Seating Arrangements:** Seat the student with ADHD away from distractions and close to the teaching action. Place the student in close proximity to instruction so the teacher can monitor the student's work. Place the student by peers who are attentive workers. Place the student away from distractions such as windows, the pencil sharpener, the door, and other high-traffic areas. Add distance between student desks. For independent work, use desks with attached chairs rather than tables where several students are seated. If the student has a high need for movement, seating her near the back of the room may provide opportunities to move without distracting peers.

In addition, the following are the important classroom accommodations (U.S. Department of Education et.al, 2008, Howard Adelman and Linda Taylor, 2015 pp28&29) the teacher can make changes in the classroom to help minimize the distractions and disruptions of ADHD:

1. Seating

Seat the student with ADD/ADHD away from windows and away from the door. Put the student with ADD/ADHD right in front of your desk unless that would be a distraction for the student. Seats in rows, with focus on the teacher, usually work better than having students seated around tables or facing one another in other arrangements.

2. Information delivery

Give instructions one at a time and repeat as necessary. If possible, work on the most difficult material early in the day. Use visuals: charts, pictures, color coding. Create outlines for note-taking that organize the information as you deliver it.

3. Student work

Create a quiet area free of distractions for test-taking and quiet study. Create worksheets and tests with fewer items; give frequent short quizzes rather than long tests. Reduce the number of timed tests. Test the student with ADD/ADHD in the way he or she does best, such as orally or filling in blanks. Show the student how to use a pointer or bookmark to track written words on a page. Divide long-term projects into segments and assign a completion goal for each segment.

Let the student do as much work as possible on computer. Accept late work and give partial credit for partial work.

4. Organization

Have the student keep a master notebook, a three-ring binder with a separate section for each subject, and make sure everything that goes into the notebook has holes punched and is put on the rings in the correct section. Provide a three-pocket notebook insert for homework assignments, completed homework, and “mail” to parents (permission slips, PTA flyers).

Color-code materials for each subject. Allow time for student to organize materials and assignments for home. Post steps for getting ready to go home. Make sure the student with ADD/ADHD has a system for writing down assignments and important dates and uses it.

Research has shown that children with ADHD present unparalleled behaviors to those required in classrooms. Students with ADHD have trouble with self-organization, on-task, and social behaviors (Imeraj et al., 2013). Researchers investigated the various classroom behavior strategies, and established the effectiveness of appropriate classroom-based interventions, including behavioral, academic, and social. As well, researchers have correlated effective and successful inclusive classroom well-structured classroom with environmental cues effective implementation of academic, behavioral, social interventions, and found these interventions to enhance student achievement, positive self-identity, improve prosocial behaviors, and skills (Anderson, Watt, Noble, & Shanley, 2012; Daley et al., 2014; DuPaul, Eckert, & Vilaro, 2012; Dupaul & Wyendt, 2006; Trout et al., 2007; Vannest, Davis, Mason, Burke, 2010, Arthur, 2016).

2.5.4. Behavior Management Strategies

Behavior intervention is the major component of effective instruction for children with ADHD. Exhibiting behavior that resembles that of younger children, children with ADHD often act immaturely and have difficulty learning how to control their impulsiveness and hyperactivity. They may have problems forming friendships with other children in the class and may have difficulty thinking through the social consequences of their actions (U.S. Department of Education, 2006 pp20).

The goal of behavior management strategies is to help students learn to manage their own behavior. The following strategies are most effective when used in conjunction with evidence based instructional strategies.

1. Prevention Strategies (Antecedent-Based Strategies)

According to Dupaul & Weyandt (2006), antecedent-based strategies are manipulative actions, effects, and events that precede targeted behavior in an effort to preclude the occurrence of problematic behavior. These strategies increase the chances for alternative, appropriate, and on task attention to occur. The following are some of antecedent-based interventions employed to forestall the occurrence of inattentive and disruptive behaviors: insistent and dynamic instructions on classroom rules, choice making, and reduction in assignment of tasks (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011).

For effective classroom management, teachers must remain proactive in teaching and maintain continuous reiteration of classroom rules. These rules should be simple, few in number, phrased in a positive manner, and posted in full view of all students (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011). Choice-making intervention grants students the privilege to choose from two or more concomitantly presented classroom activities. It helps in minimizing frequency of disruptive behaviors as well as encourages on-task and prosaically behaviors.

Another antecedent-based strategy frequently used for modifying disruptive behavior in students with ADHD is to reduce or modify content and length of task assignment. As students succeed in completing shorter assignments, the length of subsequent assignments may be gradually increased, thereby shaping task-related behaviors to parallel classroom models (DuPaul & Stoner, 2003; Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011).

The U.S Department of Education (2006) reported the following preventive measures that support students in demonstrating positive behavior, (William & Mary T/ TAC, 2017 pp7-10):

Nonverbal supports: develop inconspicuous, nonverbal messages such as eye contact, hand gestures, or other signals that teach students to recognize the conditions that trigger specific behaviors. This system is most effective if used before the behavior escalates or intensifies.

Choice as reward: provide choices of activities between assignments or embed choices within assignments (e.g., choice of materials, readings, response modes, peer partners).

Checking with Chimes: set reminders at random intervals on an electronic device, such as a smartphone or kitchen timer to teach students to monitor their attention to task. Time intervals should be set based on the student's attention span and the pace of the lesson (typically 3 to 5 minutes). When the tone sounds, the student charts or marks whether she is engaged in learning. A simple yes or no checklist works well. Students can monitor their own behaviors by giving themselves points or checkmarks for appropriate behavior.

Environmental Prompts: Use behavioral and environmental prompts to increase desired classroom behaviors. For example, pictorial prompts of students attending in class serve as a reminder of the teacher's expectations for learning and behavior. Electronic visual aids such as interactive whiteboards and document cameras are helpful for capturing the attention of students with ADHD (Piffner2011).

Priming Procedure: Prime the student before an assignment or lesson by reviewing a list of student-identified privileges or reinforcements that can be earned following a specified work period.

Proximity Control: Teacher proximity is highly effective for helping students with ADHD maintain attention. For example, the teacher may move closer to the student when giving directions and monitoring seatwork.

Timers: Set a timer to indicate how much time remains in the lesson or work period. The timer should be clearly visible so students can check remaining time and monitor their progress.

Wristwatch or Smartphone: Teach the student to use a wristwatch or smartphone to manage time when completing assigned work. Many watches and smartphones have built-in timers that can be programmed to beep at set intervals.

Music: Play different levels and tempos of music to help students understand the activity level appropriate for particular lessons. For example, using quiet classical music for individual learning activities helps block distractions and creates a calm classroom environment.

2. Reinforcement Strategies (Consequent-Based Strategies)

Children with ADHD require specific and frequent feedback and/or reinforcement immediately following the demonstration of desired behaviors. When students are learning new behaviors, it is generally important to reinforce close approximations first as a way to shape behavior. Once a behavior is established, the frequency of reinforcement can be gradually decreased. Students with ADHD tend to quickly lose interest with repetition, so a variety of easy-to-implement reinforcers should be considered (U.S. Department of Education, 2006)

Consequent-based strategies are interventions that manipulate environmental events subsequent to specific or target behavior to alter the frequency of specific behaviors. Alteration of behavior frequency includes the attempts to increase incidences of adaptive behavior or to decrease the probability for the occurrence of problematic behavior. Verbal reprimand from teachers and/or removal from the classroom are most commonly used consequent based strategy for disruptive behavior in the classroom environment (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011).

According to Dupaul and Stoner (2003), exclusive use of punishment-based strategy has shown ineffectiveness for Children with ADHD and related disruptive behavior disorder; however,

other consequent-based strategies have empirical support and include prudent reprimand, token reinforcement or economy, and response cost. Teachers frequently use reprimands in response to disruptive behavior; however, this approach is often punitive and rarely delivered in ways that achieve positive behavioral change in Children with ADHD (Dupaul & Weyandt, 2006). This includes teachers specifically communicating the concerns regarding the student and consistently communicating the concerns immediately following the first occurrence of problem behavior(s). The reprimand should be delivered in brief, calm, and quiet comportsment, and preferably in private while maintaining eye contact with the child. Time-out intervention, when viewed from positive reinforcement perspective, yields enhancing utility as a consequent based strategy for problem behavior change (Barnes, 2014).

Token reinforcement is a contingent positive reinforcement-based intervention for shaping behavior. Various researchers have acknowledged the utilities and success rate of and recommended token reinforcement as a behavior management intervention for restructuring inherent negative presentations of ADHD characteristics. In token programs, students earn immediate reinforcers such as stickers, exchangeable points, teacher's praise, poker chips, or treats for meeting behavioral expectation or for completing assigned work (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011). The token economy provides consistent, immediate positive reinforcement without interruption, which is a requisite constituent in ADHD behavior restructuring (Carnett et al., 2014; Coelho, et al., 2015; DuPaul, Weyandt, & Janusis, 2011).

Dupaul and Weyandt (2006) pointed out that because impaired and delayed responses to environmental events appears to be the primary deficit that underpins most of the ADHD behavior presentations, effective behavior change requires that contingencies be immediate and frequent. Furthermore, Barnes (2014) and DuPaul, Weyandt, and Janusis (2011) outlined the effective guidelines for administering reinforcement-based intervention:

- First, because children with ADHD presentations may have trouble sustaining consistent behavior when dispensation of reinforcement follows partial or intermittent schedules, administration of reinforcement should be frequent and consistent.

- Second, rewards should be customized to fit students' preferences and interests which is varied over time to ensure that children do not become complacent of the same reinforcers.
- Finally, reinforcement should be administered as quickly as possible when the target behaviors occur as a consequence-based intervention, token economy is distinguished as an effective strategy for shaping negative ADHD behaviors.

Various studies show that token intervention strategies can modify disruptive characteristics of ADHD conditions and enhance on-task behaviors particularly when combined with a public approval like oral commendation, or corporal sign of endorsement (Carnett et al., 2014; Coelho, et al., 2015; Dupaul, Eckert, & Vilaro, 2012; DuPaul, Weyandt, & Janusis, 2011; Marafao, Cruz, & Bertelli, 2013).

During the observation, observed behaviors relating to destruction of property, talking back to adults, teasing peers, using materials inappropriately, verbally intruding on the class, being out of their seat, or acting aggressively towards others were noted for each child, and coded as disruptive (Fabiano & Pelham, 2003). The observer coded disruptive and on-task behaviors in 15-minute intervals. The teacher provided immediate feedback when the children violated rules and rewarded the student with points for positive behaviors. The students then exchanged the points for computer game time. In their study, Fabiano and associate recorded significant reduction in negative behaviors from 29.86% to 10.33% (Fabiano & Pelham, 2003).

The following are some of the strategies easy-to-implement reinforcers and should be considered (U.S. Department of Education, 2006):

Praise, Praise, Praise: Attentiveness and appropriate classroom behavior are prerequisites for learning; therefore, interventions that promote these behaviors should be an integral part of the teaching process for all students. When teachers are attentive to positive behavior and specifically praise students for these behaviors, they can engage students before their attention drifts while highlighting desired behavior (U.S. Department of Education, 2006). Effective praise statements (a) are contingent on the demonstration of desired behavior, (b) specifically describe the positive behavior, and (c) are provided immediately and enthusiastically following the desired behavior (Adelman and Taylor, 2015 pp36).

Home-School Reinforcement System: One of the most reinforcement effective strategies is collaboration with students' parents. Communicate as frequently as possible (daily is optimal) about the amount and quality of work, as well as the increase or decrease in appropriate behavior to help parents coordinate their reinforcement system with the school's system. A simple checklist consisting of a list of the desired behaviors and a place for assignments that can be checked off, along with space for special notes, works best.

3. Verbal feedback

Verbal feedback is comprised of both praise and corrective statements. According to Piffner (2011,) the following points should be considered when designing a behavioral plan (William& Mary T/TAC, 2017 pp. 9):

- **Verbal Praise:** Use simple, but specific praise phrases that clearly identify the desired behaviors. For example, *Larry, thank you for raising your hand before answering the question* lets the student know the specific behavior and condition for which he was praised. General praise (e.g. *good job*) is less meaningful for students.
- **Verbal Redirection:** Many students with ADHD require frequent redirection. Redirect students using clear, concise, and inconspicuously delivered verbal cues to remind students of desired behaviors, rather than long explanations.
- **Corrective Feedback:** Some students with ADHD require brief, simple correction for disruptive behaviors. Correction should be directed at the student's behavior, not the student (e.g., "No shout-outs. Please raise your hand before answering the question" vs. "stop being disruptive!"). Provide the feedback immediately following the behavior. Provide correction in a calm manner and in close proximity to the student (Piffner, 2011). Avoid humiliating the student when correcting his behavior.
- **Options for Students:** When providing corrective feedback or redirecting the student, it is often helpful to provide the student with options. For example, "Sue, you can do the assignment now, during lunch, or after school." (Piffner, 2011 in William& Mary Training & Technical Assistance Center 2017 pp. 9)

4. Self-Regulation strategies

Gawrilow, Morgenroth, Schultz, Oettingen, and Gollwitzer (2013) provided positive indications for the efficacy of self-regulation intervention in ADHD condition, as self-administered

interventions, which seek to enhance self-control behaviors. Self-regulation strategies give Children with ADHD the autonomy to monitor and evaluate their progress in peer interactions, classroom behavior, and work performance with charts, Likert scales, or checklists at regular intervals. Teachers evaluate and record the same observations as the student using the same scale as the student. The student receives reinforcement based on his or self-evaluated performance and how proximal the student's self-evaluation ratings are to teacher ratings. As the student's self-evaluation ratings continue to parallel teacher ratings, the required frequency of matches to teacher ratings is reduced progressively to the extent that only self-ratings are used (DuPaul, Weyandt, & Janusis, 2011). Indicators from a meta-analytic work of Reid, Trout, and Schartz (2005) recorded significant positive effects for ADHD students' on-task behavior and academic performance. The underpinning effectiveness of self-management is inherent in educating ADHD students to monitor their own behaviors. Dupaul et al. (2011) explained that habitual practice of monitoring own behavior often leads to behavior improvement, including organizational skills.

2.5.5. Home-School Collaboration and Communication

To implement the intervention strategies effectively, families are invaluable resources for teachers. Ongoing communication with their child's teacher allows parents to become familiar with classroom expectations and allows them to follow up at home. Communication also lets teachers know techniques that are working in the home setting (Alberta Education, 2006). For instance consequent-based strategies are interventions that manipulate environmental events subsequent to specific or target behavior to alter the frequency of specific behaviors. To make these strategies effective, there must be a common plan collaborative work between the school and the home environment (Dupaul & Weyandt, 2006; DuPaul, Weyandt, & Janusis, 2011).

According to the Alberta Education (2006), the following strategies are designed to increase home-school communication (William & Mary T/TAC, 2017pp9): Make use of checklists and charts to keep parents informed of the student's progress on a daily basis; Note the effective reinforcement techniques used in the classroom; Provide parents with an e-mail address to increase timely communication; If they do not have easy access to e-mail provide them with telephone numbers and optimal times for calling; A homework website that provides assignments for the week is very helpful to parents and guardians of students with ADHD; Class

news regarding projects and the week's instructional topics can also be posted; A homework hotline that gives the assignments for the night and also provides helpful suggestions for completing them can help families support their children's work completion and alteration of behavior frequency includes the attempts to increase incidences of adaptive behavior or to decrease the probability for the occurrence of problematic behavior.

2.6. The challenges in teaching children with ADHD

Studies reported that lack of classroom management component in teacher education curriculum, unproductive classroom behaviors and management of the behaviors remained the major challenges for teachers. Thus, teachers were less optimistic of their skills for management of negative classroom behaviors (Levin & Nolan, 2010; Roache & Lewis, 2011; Romi, Lewis, Roache, & Riley, 2011; Roorda, Koomen, Spilt, & Oort, 2011; Westling, 2010).

Teachers should have knowledge about ADHD and its associated behavioral disorders to provide appropriate instruction for these children without challenge. This helps the teachers to possess positive and nondiscriminatory attitudes towards the children with ADHD. But, as proved in Arthur N (2016) misconceptions still exist about ADHD and the potential for misdiagnosis remains a reality.

Researches show that lack of knowledge or misperception about ADHD could lead to teachers' insensitivity to or failure to notice behaviors indicative of a child in need of help. Consequently, this failure to notice or insensitivity could cause teachers to respond with inappropriate behavior modification consequences and could cause the teachers to provide inaccurate data to mental health or medical practitioners regarding the effects of medication (Blotnick-Gallant et al. 2014; Sherman, Rasmussen, & Baydala, 2008, Arthur, 2016).

Adelman and Taylor, (2015) reported the following challenges that students with ADHD present for teachers: They demand attention by talking out of turn or moving around the room. They have trouble following instructions, especially when they're presented in a list. They often forget to write down homework assignments, do them, or bring completed work to school. They often lack fine motor control, which makes note-taking difficult and handwriting a trial to read. They often have difficulty with operations that require necessary steps. They usually have problems with long-term projects where there is no direct supervision. They don't pull their weight during

group work and may even keep a group from accomplishing its task. Students with ADD/ADHD pay the price for their problems in low grades, scolding and punishment, teasing from peers, and low self-esteem (School Mental Health Project, pp27).

Generally as reported by different researchers, teachers faced professional challenge to teach children with ADHD easier. Thus, the researchers suggested that universities should add ADHD diagnostic procedures, remediation techniques to the education curriculum and accurate perceptions of the difficulties experienced by children with ADHD should also be of central concern in teacher training programs (Mioduser, Margalit, & Efrati, 1998). Teachers must be aware about early identification of children with ADHD to provide effective classroom techniques, and other accommodations and adaptations in the classroom and at home (Sloan et al., 1999). This helps the teacher to cope with such children and be effective to deal with the challenge (McFarland et al., 1995). Thus, teachers' beliefs about and attitudes towards ADHD directly influence their behaviors and pedagogical approach. Consequently, such beliefs have implications for students' classroom behaviors and learning (Brown, Harris, & Harnett, 2012; MacFarlane, & Woolfson, 2013; RubieDavies, Flint, & McDonald, 2012).

According to Mioduser et al. (1998), the foundation of a teacher's theoretical knowledge of ADHD is acquired at university and the classroom provides the day to day reality which teachers require to shape this knowledge into workable plans and strategies. But as reported in (Jerome et al., 1994) both practicing teachers and those still in training can benefit from formal training to eliminate any gaps in their knowledge. Teachers need further training to work effectively with ADHD students. Teachers are the driving force behind enacting educational policies, as they are the caretakers of classroom climates. So teachers can either hinder or promote the success of inclusive education depending on their attitudes toward inclusive practices. If they recognize a policy's pedagogical merit, teachers can commit to making an effective effort. With positive attitudes, teachers can dedicate extra intensity to instructional work and time with students with ADHD who have educational barriers (Bornman and Donohue, 2013, Arthur, 2016).

2.7. Previous studied on the Area

Previous researchers found that (ADHD) is one of the most commonly diagnosed and heavily researched childhood disorders (Cantwell, 1996; Conners, 2000; Gaub & Carlson, 1997). It occurs in approximately 3 to 6% of the childhood population in a diversity of cultures and a

variety of geographical locations (Tannock, 1998). But, little information is available on the effect of ADHD in the school setting (Reid, Vasa, Maag, & Wright, 1994), and even less is known about teachers' knowledge of and attitudes to, the treatment of ADHD (Jerome, Washington, Laine, & Segal, 1999). Some authors have argued that teachers are poorly informed about ADHD such as the nature, course, causes, outcomes and suitable interventions for ADHD (Piffner & Barkley, 1990; Shapiro & DuPaul, 1993). However, these generalized statements are not derived from research-based studies that explore the knowledge and attitudes of educators about ADHD (Bekele, 2000).

Small number of studies that has focused upon the effectiveness of teacher observations for the identification of ADHD has been conducted (Atkins, Pelham, & Licht, 1989; DuPaul & Stoner, 1994). Only a few studies have examined teachers' beliefs and knowledge relating to general issues of identification, diagnostic criteria, and treatment of students with ADHD (Germaine, 1994; Hawkins, Martin, Blanchard, & Brady, 1991; Jerome, Gordon, & Hustler, 1994; Jerome et al., 1999). The findings from these studies suggest teachers need to be increasingly knowledgeable about assessment procedures, as well as instructional, behavioral, and social skill strategies that are appropriate for working with children who have ADHD. Teachers also need to be able to communicate with different professionals who are involved in the treatment of these students (Jerome et al., 1994).

Teachers need to have positive attitudes and knowledge about children with ADHD (Barkley, 1990; Fiore, Becker, & Nero, 1993; Goldstein & Goldstein, 1998). But there is no sufficient research that reports what is a positive teacher attitude towards children with ADHD, or what is an appropriate knowledge base (Grynkewich, 1996; Jerome et al., 1999). The discussion of the previous studies that specifically addressed teachers' attitudes and knowledge about ADHD is important as a guide to assess the gap under the study area. So this section contains the summary of previous studies.

Hawkins et al. (1991) conducted a focused study on practicing teachers from pre-kindergarten through to high school. According to the study teachers reported that many students with ADHD failed to regularly take their prescribed medications. Germaine (1994) also attempted to improve teachers' attitudes and knowledge of ADHD by presenting them with basic written facts about the disorder and the study showed that certain information improved attitudes and increased

knowledge and other information reinforced negative or unpopular beliefs, about children with ADHD. This supports the need for teacher in-service training and development (Pffifner & Barkley, 1990), as simply providing accurate information does not necessarily provide a complete solution to improving teacher understanding of ADHD.

Another comprehensive survey study by Jerome et al. (1994) on a large sample of elementary (primary school) teachers their knowledge and attitudes about ADHD showed that teachers reported a lack of opportunity to learn about ADHD during the course of their university education. They also expressed a strong interest in obtaining additional training in ADHD after graduation. Teachers also regarded ADHD as a legitimate special education problem. The findings from this study support the need for a closer working relationship between outside professionals and classroom teachers in order to reduce misdiagnosis of ADHD and to improve medication management. Teacher in-service training would also need to include dialogue and input from prescribing clinicians. The results from this study also suggested that recently qualified younger teachers, with the benefit of current in-service training regarding ADHD, had a better knowledge of the disorder than those who had been teaching for a longer period without the benefit of in-service training.

Addition, Jerome et al. (1999) administered recent follow-up to the previous study the 1994 questionnaire to a Canadian sample of 42 final year education students drawn from the same geographical area as the original sample of practicing teachers. These results were then compared to those of the Canadian sample of practicing teachers in the previous study. The hypothesis under investigation was that recent pre-service training regarding ADHD offered to education students would lead to improved knowledge beyond that of practicing teachers. The results from this study showed no evidence that current pre-service training has significantly improved the knowledge of final year student teachers, in comparison to previous samples of practicing Canadian teachers. These findings have implications for both curriculum development in university education programs, and in-service training of practicing teachers.

Perold, Louw and Kleynhans (2010) conducted the study entitled primary school teachers' knowledge and misperceptions ADHD. The study aimed at assessing the knowledge and misperceptions of primary school teachers in towns on the periphery of the Cape Town Metro pole. A quantitative study using a survey was conducted. The objectives of this study were to

determine the nature and degree of a sample of the primary school teachers' knowledge and misperceptions with regard to ADHD by means of the Knowledge of Attention Deficit Disorders Scale (KADDS). The study also set out to determine which, if any, of the selected demographic characteristics of the teachers correlate statistically with the total KADDS score. The measuring scale used was the KADDS (Knowledge of Attention Deficit Disorders Scale), which measures teachers' knowledge and misperceptions with regard to ADHD. The data were statistically analyzed. Overall knowledge of ADHD was poor. The results suggest that teachers are most knowledgeable about symptoms/diagnosis, scoring lower on treatment and general knowledge. (South African Journal of Education, 2010 pp457-473)

Lodhi, Thaver, Akhtar, and others conducted study entitled 'assessing the knowledge, attitudes and practices of school teachers regarding dyslexia, attention-deficit/ hyperactivity and autistic spectrum disorders in Karachi, Pakistan'. The objective of their study was to survey knowledge, attitudes and practices of school teachers regarding dyslexia, Attention-deficit/hyperactivity disorder (ADHD) and autistic spectrum disorder, and assess their ability to identify learning disabilities. A Cross-sectional study was conducted with 233 primary school teachers from Karachi using a self-administered questionnaire. Mean scores for the knowledge test and the ability to identify learning impaired children were 58.8% and 53.3%, respectively. Better qualified teachers scored significantly more on the knowledge and ability to identify learning impairments sections. Most teachers believed that these students should study in mainstream schools with special educators. Majority of the teachers belonged to schools where children with learning disabilities were detected using teachers' judgment. Most teachers manage these children by involving them in discussions, seating them at the front of the class, and giving them extra time. Conclusion: Knowledge about learning disabilities is very low amongst school teachers, which may limit their ability to identify learning impairments (Ayub, 2016pp 28).

Lubna and Aidah, (2013) conducted a descriptive phenomenological study regarding the experience of mothers and teachers about children with ADHD and their management practices for the behaviors of the child. The aim of the study was to investigate and describe the experience of the adults that interact on a daily basis with school-aged children with Attention Deficit Hyperactivity Disorder, which were mothers and teachers. The study aimed also to understand management practices that were used by mothers and teachers to deal with the most

prominent signs of ADHD, which are hyperactivity, impulsivity, and inattention in order to formulate a care plan. The study used a qualitative descriptive phenomenological method to explore the experiences of primary caregivers of ADHD children to control the way in which the phenomenon is experienced. Face to face, in-depth, semi-structured interviews were conducted with participants the mothers and teachers of ADHD children. The interview guide allowed mothers and teachers to express their experiences with the ADHD child. The findings of the study demonstrate the importance of understanding the experience of the mothers and teachers of ADHD children. It reflected the difficulties and issues of dealing and caring with ADHD children. There were clear defects in the knowledge, understanding, services provided for the children, and available support for the care givers. Improving services in terms of family and school care should be a major concern. The recommendations made on the basis of the results of this study can be used as a guide to improve the delivery of care services for people who have children with ADHD.

Arthur (2016) conducted correlational study which assessed Nigerian educators' knowledge about attention deficit/hyperactivity disorder (ADHD) and inclusive classroom management practices when serving students with ADHD. Specifically, the study examined the predictive correlation between teachers' demographic characteristics, including years of teaching experience, level of education, and knowledge about ADHD, as well as how their knowledge informed their choice of behavior management interventions. According to Arthur N. (2016), teachers are accountable for pedagogical responsibilities including maintenance and management of a learning environment that promotes learning and inclusion. Further, they play a significant role in identifying and supporting students with learning impairments including ADHD. Thus, it is critical for teachers to have unambiguous knowledge about ADHD and evidence-based behavior management practices. One thousand teachers participated. Results from indicated that teachers demonstrated high levels of misconception and limited knowledge regarding ADHD. Teachers' levels of education and years of teaching experience did not match or improve their cumulative knowledge of ADHD. Knowledge about ADHD predicted teachers' choice of behavior modification strategies for the characteristic behaviors of ADHD. Teachers implemented negative disciplinary consequences (consequence-based strategies) and multiple interventions for shaping specific negative behaviors associated with ADHD, indicating a lack of competence in classroom management practices.

Ashenafi, Thanasekaran, Shivaleela and Dereje, (2019) conducted study to investigate primary school teachers misconceptions about ADHD in Nekemte town, Oromia region, Western Ethiopia. According to the findings of this study, primary school teachers have misconceptions about ADHD. The study suggested the need of equipping teachers with basic knowledge of ADHD and enables them provide effective support for students with this exceptionality.

Birhanu Mekuria (2010) also conducted a study entitled 'the behavior of children with hyperactivity and teachers' response to meet their educational needs'. The main purpose of the study was to investigate the behavioral, social and academic characteristics of children with hyperactivity in the regular classroom and teachers' response to meet their educational needs. To achieve this objective, he employed qualitative case study design. Direct systematic observations, in-depth one-on-one interviews and document reviews were the instruments used to collect data. Four children with hyperactive behavior, their classroom teachers, parents and peers who were selected purposefully participated in the study. The collected data were analyzed qualitatively by using case by case and cross case analysis. As he stated, the findings of the study have revealed that the four children display hyperactive behavior and their hyperactive behavior is severe enough in disturbing the class. Moreover, the hyperactive behavior negatively affects not only the children's academic performance and social interactions but also it presents great challenges to teachers, parents and peers. Due to lack of adequate knowledge and training among teachers, unavailability of facilities and materials and parents' unwillingness to work collaboratively with teachers concerning their children's behavior problems, the children are not provided with sufficient and appropriate educational and social supports by their classroom teachers and parents. Finally, based on the findings of the study, some valuable measures were recommended which enable teachers and parents to help children with the disorder get the best socially and academically.

CHAPTER THREE

3. Methods of the study

3.1. Design of the study

Research design is important to make decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study. A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. If the research is the conceptual structure within which research is conducted, the research design concerns the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data (C.R.Kothari, 2004, pp31). Descriptive survey is more preferable to know the opinion, views, attitudes, or beliefs people have regarding a certain issue rather than knowing about the existence or occurrence of the issue (Belay and Abdinasir, 2015). Therefore, a descriptive survey method was selected because it serves the intended purpose of assessing the awareness and practice of teachers regarding children with attention deficit hyperactivity. The researcher attempts to describe the level of awareness and practice of teachers regarding children with ADHD through the following dimensions: characteristics, identification, assessment and support.

3.2. Population and sample

3.2.1. Area of the study

In this study the data were obtained from government primary school teachers of Akaki Kality sub city, Addis Ababa. Akaki kality sub city is administratively divided in to thirteen woredas. There are twenty three government schools in Akaki Kality Sub city. Three woredas and one government primary school from each woredas were selected purposively based on the information that there were students suspected of ADHD there. The researcher conducted the study targeting school teachers of grades 1-8 from government schools of three woredas of Akaki kality sub city. The schools were selected purposively because these schools are near to the researcher's residence and they are from different woredas.

3.2.2. Participant of the study

The target population of the study was teachers who teach from grades 1to8 in 2012 E.C. at three government schools of Akaki Kality sub city. The schools were Ethio Korea primary school, Hibret Chibo primary school and Kality Bulbula primary school. Besides teachers, students with ADHD and their parents, school principals, special needs education professionals and counselors were key informant of the study.

Table1: Total number of teachers in each school

Schools	Number of teachers														
	Certificate			Diploma			Degree			Masters	TOTAL				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Ethio Korea school	-	-	-	22	21	43	5	6	11	-	-	-	27	27	54
Hibret chibo school	1	2	3	6	16	22	13	10	23	-	1	1	20	29	49
Kality bulbula school	-	-	-	24	20	44	15	7	22	-	-	-	39	27	66
Grand Total	1	2	3	52	47	109	33	23	56	-	1	1	86	83	169

The sample populations

The samples were selected using proportional stratified sampling techniques. As indicated on the above table, there were 169 teachers who were teaching in the selected schools in 2012 E.C. from grades 1to8. Among these, the researcher selected 56(33%) teachers using stratified sampling based on sex and educational qualification as strata. Stratified random sampling is more appropriate to employ when the population list is composed of heterogeneous groups and when the required responses have to be cross tabulated by different factors as educational status, sex, socioeconomic status etc. (Belay T. and Abdinasir A. 2015pp152&153).

Table2: the sample populations from each school

Schools	Number of teachers selected														
	Certificate			Diploma			Degree			Masters			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Ethio Korea school	-	-	-	9	5	14	2	3	5	-	-	-	11	8	19
Hibret chibo school	-	1	1	3	3	6	4	3	7	-	1	1	7	8	15
Kalitybulbulaschool	-	-	-	9	6	15	4	3	7	-	-	-	13	9	22
GRAND TOTAL	-	1	1	21	14	35	10	9	19	-	1	1	31	25	56

3.2.3. Sampling technique and procedure

Dawson 2006 stated that it is possible to use a mixture sampling techniques with in one study which may help to overcome some of the disadvantages found within different procedures. Taking this in to consideration, the researcher took appropriate sampling techniques. This selection of sampling techniques was made based on the objective of the study, resourcefulness of the sample and the type of population. Accordingly, the sampling techniques employed to draw research site and participants for this study were purposive and stratified sampling techniques. The teachers were selected using stratified sampling and some parents and principals were selected using purposive sampling.

There were 169 teachers who were teaching in the selected schools in 2012 E.C. from grades 1to8. Among these, the researcher selected 56(33%) teachers using stratified sampling based on sex and educational qualification as strata. Stratified random sampling is more appropriate to employ when the population list is composed of heterogeneous groups and when the required responses have to be cross tabulated by different factors as educational status, sex, socioeconomic status etc. (Belay and Abdinasir, 2015pp152&153).

In addition 3 school directors, 1 cluster supervisor, 3guidance and counselors, 2special needs education professionals, 3 students with ADHD and their parents were selected purposively.

Therefore totally 71 participants were included for the study. The data was collected from these samples through data collection tools.

3.3. Sources of Data

Data source of the study involved both primary and secondary data. According to (C.R.Kothari, 2004) the primary data are those which are collected afresh and for the first time, and thus happen to be original in character. The secondary data, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process. The methods of collecting primary and secondary data differ since primary data are to be originally collected, while in case of secondary data the nature of data collection work is merely that of compilation. We can obtain primary data either through observation or through direct communication with respondents in one form or another or through personal interviews. This, in other words, mean that there are several methods of collecting primary data, particularly in surveys and descriptive researches. Secondary data means data that are already available i.e., they refer to the data which have already been collected and analyzed by someone else. When the researcher utilizes secondary data, then he has to look into various sources from where he can obtain them. In this case he is certainly not confronted with the problems that are usually associated with the collection of original data (pp112).

3.3.1. Primary sources of Data

The primary data were collected from the participant teachers through questionnaire, interview and observation. The questionnaire consisted of demographic characteristics having six items and the close ended questions with five point Likert Scale regarding children with ADHD. The questionnaire was designed to collect data from teachers about their awareness regarding children with ADHD. Sixty questions with five point Likert Scale were used to collect data from primary school teachers regarding their awareness and practice in teaching children with ADHD. The questionnaire was focusing on; characteristics, effect of ADHD on school performance, identification, support and challenges in teaching children with ADHD. It had two sections: section one focuses on the demographic characteristics of the respondents and section two obtains ideas by using a five point Likert Scale, with a continuum strongly agree, agree, uncertain, disagree and strongly disagree to assess the awareness and practice of respondents

regarding children with ADHD. The participants were asked to indicate the extent of their agreement with each statement using a five-point Likert scale.

To confirm the quantitative result obtained through structured questionnaire, qualitative instruments were used. The researcher collected data through interview from school principals, counselors, SPNE professionals, parents, cluster supervisor and from teachers. Observation was also conducted to observe the natural setting of the case ADHD in the classroom and to observe the teachers practice to support these children.

3.3.2. Secondary source of data

Secondary data means data that are already available i.e., they refer to the data which have already been collected and analyzed by someone else. When the researcher utilizes secondary data, then he has to look into various sources from where he can obtain them. In this case he is certainly not confronted with the problems that are usually associated with the collection of original data. Secondary data may either be published data or unpublished data (C.R.Kothari, 2004, pp112). Secondary source of data was collected from school record and information staff. The researcher asked the school principals to look and cross check the teachers' demographic information and the total number of teachers from the record office and got permission. The researcher analyzed the documents concerning teachers' awareness and practice regarding children with ADHD.

3.4. Tools of data collection

In order to get secure, reliable and adequate information for the study, the researcher used both quantitative and qualitative data collection tools. These include: five likert scale questionnaire, semi structured interview, observation checklists and teacher and parent rating scales .The questionnaire was developed for teachers to assess the level of awareness and practice regarding children with ADHD in the following dimensions: characteristics, identification, training and support the effect of ADHD on school performance, the challenges in teaching children with ADHD. The questionnaire had two parts. Part one contained background search questions (i.e. sex, qualification, experience, school work, and training). Part two presented close ended items. The teachers were asked to choose from alternatives. The questionnaire was prepared based on the research questions related literature reviews on the area.

Semi structured interview was designed to school directors, cluster supervisor, guidance and counselors, special needs education professionals , and parents to enhance the data collected through questionnaire. It was designed to validate the data obtained through questionnaire. The semi-structured interview guides was developed by the researcher based on the purpose of the study and research questions. This was done after reading different literatures (journals, articles and research papers) on the area of ADHD, characteristics of children with the disorder and teachers 'awareness and practice regarding the behavior problems of these children.

3.5. Procedures of data collection

The procedure followed for data collection had the following steps with the aim of ensuring the legal and ethical nature of research which would be very crucial for the successful completion of the particular study. First the researcher obtained permission letter from Department of Special Needs Education under College of Education and Behavioral Studies found of Addis Ababa University. The first permission letter was submitted to Akaki Kality Sub city Education Beaurto to get information about woredas and schools. The second permission letters was given to the principals of each school. Then permission was obtained commence the activity of data collection. This allowed the researcher constantly visited the selected schools and created rapport with the school personnel and made the data collection process easier.

The data was collected through the selected instruments based on the informed consent of the schools. The participants of the study were informed about the purpose of the study by the school director and partly by the researcher before the questionnaire distribution. There had been a clarification on some issues which not clear for the participants during questionnaire administration.

3.6. Methods of data analysis

The collected data through the instruments was checked for accuracy. Then the collected data was consolidated, tabulated and analyzed with respect to each of the five topics mentioned above. The questionnaire was first collected, tallied and tabulated. Thereafter, the interpretation made with the help of frequency and percentage. Because of the descriptive nature of the study, frequency and percentage value were used to analyze the data obtained through close ended questionnaire. The responses from observation and rating scale was summarized and analyzed descriptively. The data collected through the interview was summarized and described with

questionnaires in relation with the topic thematically. Conclusion was drawn based the collected data and finally the possible recommendations was forwarded.

3.7. Ethical Issues

There are certain sets of acts that are regarded undesirable and not allowed in research. Different research institutions, academic disciplines, professional associations and other organizations use different codes of conduct to guide researchers in discharging their duties and responsibilities (Belay Tefera &Abdinasir Ahmed, 2015).

The committee on Scientific and Professional Ethics of the American Psychological Association suggests four very important issues that a researcher has to contend with (Fraenkel &Wallen, 1993, Belay T. & Abdinasir A.2015, pp38). In conducting this study the researcher will keep these important ethical issues.

- ❖ Ensuring consent and respect: subjects must be treated with respect and the researcher needs to seek their cooperation in the research.
- ❖ Ensuring protection: subjects should not be predisposed to any kind physical, psychological or social of harm because of giving their consent to participate in the research.
- ❖ Ensuring confidentiality: the subjects' identities should be protected both in writing and verbal reporting so that the information to be collected does not embarrass or harm them.
- ❖ Ensuring truth: the researcher should tell the truth when he write up and report the findings.

CHAPTER FOUR

4.1. DATA ANALYSIS

4.1.1. Introduction

This part of the study deals with the presentation of the data obtained from questionnaire, interviews, observations and document analysis. The presentation has two sections. The first section deals the description of the demographic data of the participants. The second part focuses on the findings related to the teachers' awareness and practice regarding children with ADHD. The data are presented in the form of percentages using tables and organized thematically.

4.1.2. General Information about the Participants

Identifying the characteristics of participants is very important in the analyses and interpretation of data. Thus it shows us whom the information was gathered. From these schools a total of 71 participants were taken and participated in the study. The questionnaire was administered for teachers. The interview was held with teachers, cluster supervisor, school principals, parents, special needs education professionals and counselors.

Table 1:- Distribution of the respondents by their respective schools

Participants	Schools			
	Ethio Korea	Hibret chibo	Kality bulbula	Total
F	24	20	27	71
%	33.8	26.1	38	100

As shown in the tables above there were totally 71 participants. From these the majority of the participants were teachers who were 56 of in number. These teachers' are proportionally selected from three schools. Thus 19(33.9%) of the teachers from Ethio Korea school,15 (26.8%) of the teachers from Hibret Chibo school, and other 22(39.3%)of the teachers were from Kality Bulbula school.in addition one from each school and total of three school principals, three students with ADHD and their parents, three guidance and counselors were taken purposively. Two special

needs education professionals were taken from two schools, Ethio Korea and Hibret Chibo. There was also one cluster supervisor. Totally, 24(33.8%) of the participants from Ethio Korea school, 20(26.1%) of participants from Hibret Chibo school and 27(38%) of the participants from Kality Bulbula school were taken. And the totals of 71 participants were selected in the study.

4.1.3. General Background of the Participants

Table 2:- Characteristics of participants by gender, age, qualification, experience and training

	Frequency	Percentage
Gender		
Male	31	55.4
Female	25	44.6
Grand Total	56	100
Teachers' age range		
20-30	10	17.9
31-40	23	41.1
41-50	19	33.9
51 and above	4	7.1
Grand Total	56	100
Qualification		
Certificate	1	1.8
Diploma	35	62.5
Degree	19	33.9
MA & above	1	1.8
Grand Total	56	100
Rang of teachers' experience		
1-3years	9	16.1
4-6years	15	26.8
7-9years	15	26.8
10 and above years	17	30.4
Grand total	56	100
Taking training on ADHD		
YES	8	14.3
NO	48	85.7
Grand Total	56	100

As shown in table two above 31(55.4%) of the participant teachers were males and the other 25(44.6%) of them were females. Concerning the age of the participant, 10(17.9%) of the participant are under the age range of 20-30 years, 23(41.1%) of them are under the age range of 31-40 years, 19(33.9%) of them are under the age range of 41-50 years and the remaining 4(7.1%) of them are under the age range of 51 and above years.

As indicated on the same table, most of the participant teachers 35(62.5%) are diploma holders and certificate and MA holders are only 1(1.8%) each. The other 19(33.9%) of them are first degree holders. In addition the table shows the years of experience and trainings on ADHD. Based on this, 17(30.4%) of the participant teachers have ten and above years of experience, 15(26.8%) of the have four to six years of experience, and the same 15(26.8%) of them have seven to nine years of experience. The remaining 9(16.1%) of the participants have one to three years of teaching experience. As shown on the table most of the participants (85.7%) did not take any training on ADHD and only 14.3% of them have taken trainings. From this it is possible to conclude that the issue concerning children with ADHD is almost forgotten or neglected. We know that there are much training provided for teachers with in a year which are funded by the government and other concerned NGOs to equip their profession.

Table 3:- Characteristics of special needs education professionals, counselors, school principals and cluster supervisors

Participants	Qualification		Gender		Total	percentage
	Diploma	Degree	M	F		
SPNE professionals	1	1	1	1	2	22.2
Counselors	-	3	3	-	3	33.3
Principals	-	3	2	1	3	33.3
Supervisor	-	1	1	-	1	11.1
Grand Total	1	8	7	2	9	100

As indicated on table three above there were nine participants selected purposively for the interview, there were two special needs education professionals participated on the study. One of them is male and diploma holder and the other one is female and BA degree holder. There were three counselors and all of them are males and BA degree holders in psychology. As shown on

the same table there were three principals participated on the study who are first degree holders. Two of the principals are males and the other one is female. The last participant was one cluster supervisor who is male and degree holder.

The students were selected purposefully based on the information obtained from the key informants, classroom teachers and SPNE professionals. First the students were selected based on the symptoms ADHD behaviors are severe enough in disturbing the classrooms and consistently affect their learning and social interaction as reported by the teachers.

Table 4:- Students and parents distribution by gender and level of education

Students	Gender		Frequency	Percentage
	M	F		
Grade 4	1	-	1	33.3
Grade 6	1	-	1	33.3
Grade 7	1	-	1	33.3
Grand Total	3	-	3	100

Parents				
Grade12	1	-	1	33.3
Grade 4	-	1	1	33.3
Illiterate	-	1	1	33.3
Grand Total	1	2	3	100

Table four above shows the distribution of students with ADHD and their parents by gender and level of education. There were three students and all of them are males. They were grade four, grade six and grade seven students. Concerning the parents, one of the parents is male and completed grade twelve, the second parent is female and completed grade four and the third one is female and illiterate.

4.1.4. Description of the Cases of Children with ADHD

The diagnosis of AD/HD is made by gathering information from the child, parents, teachers and special needs education professionals, combined with direct observation and information from other sources. Psychological performance assessments are often used to augment information

collected from interviews, behavioral checklists and observations. The Canadian Attention Deficit Hyperactivity Disorder Resource Alliance (CADDRA) strongly recommends that an assessment of AD/HD include evidence directly obtained from parents and teachers who may be able to provide information on age of onset, duration of symptoms, variation of symptoms in different settings, coexisting conditions, and degree of functional impairment. (Alberta Education, 2006pp7)

Before assessing the teachers' awareness and practice, the researcher tried to check the presence of children with ADHD using checklists. Thus, three students were selected purposefully based on the information obtained from the key informants, classroom teachers and SPNE professionals. First the students were selected based on the symptoms ADHD behaviors are severe enough in disturbing the classrooms and consistently affect their learning and social interaction as reported by the teachers'. The researcher used the SNAP IV Teachers and Parents Rating Scales (SNAP IV TPRS) to identify the cases of ADHD on these children. It is a revision of Swanson, Nolan and Pelham questionnaire. First the researcher translated the checklist in to Amharic language and provides orientation to teachers and parents. In addition the researcher used observation checklist and interview from parents and teachers to identify the presence of the behavior ADHD. The observation checklist was developed to observe and identify the cases consisting of the core symptoms of ADHD. These core symptoms were obtained and adapted from DSM-IV (APA, 1994). Based on the findings, the researcher described the cases using 'pseudo name' for each child. The average rating score per items on SNAP IV is 2.

Table 5: the score of children on rating scale

Child's name	Sex	Age	Grade	Average Score (Rating per Items)	
				Rating Scale filled by Parent	Rating Scale filled by Teacher
Belay	M	15	7	33/18 = 1.83	43/18 = 2.38
Yonas	M	13	6	38/18 = 2.11	44/18 = 2.44
Hailu	M	10	4	35/18 = 1.94	41/18 = 2.27

The above table shows the score of each child on rating scale filled by parents and teachers respectively. As can be seen on the table the average score for Belay is 1.83 and 2.38 from the

rating scale filled by his parent and by his teacher respectively, the average score for Yonas is 2.11 and 2.44 filled by his parent and by his teacher respectively and for Hailu is 1.94 and 2.27 filled by his parent and by his teacher respectively. For each child the score on rating scale is average and above average as reported by parents and teachers respectively. The score reported by parents is below that of the scores reported by teachers for each child. The reason may be either the parents lack awareness or the need to hide their child problem.

4.2. Teachers' awareness and Practice regarding children with ADHD

4.2.1. Characteristics of Children with ADHD

Teachers were asked to show their agreement on the specific characteristics of children with ADHD to assess their awareness regarding Characteristics of children with ADHD. There were twelve specified items asked. The items and the frequency percentage is described as follows: Submit inaccurate or incomplete work [1] strongly agree 3(3.9%), agree 23 (45.1 %), undecided 11(21.6%), disagree 11(21.6%) and strongly disagree 4(7.8%); Have difficulty attending to conversations, activities or tasks [2] strongly agree 4(7.8%), agree 25(49%), undecided 4(7.8 %), disagree 14(27.5%) and strongly disagree 4(7.8%); Have difficulty staying seated or playing quietly [3] strongly agree 5(9.8%), agree 35(68.6%), undecided 2(3.9%), disagree 8(15.7%) and strongly disagree 1(2%); Will appear fidgety [4] strongly agree 5(9.8%), agree 34(66.7%), undecided 0(0%); disagree 10(19.6%) and strongly disagree 2(3.9%); Act as if driven by a motor [5] strongly agree 4(7.8%), agree 27(52.9%), undecided 2(3.9%), disagree 16(31.4%) and strongly disagree 2(3.9%) ; Difficult participating in tasks that require taking turns [6] strongly agree 2(3.9%), agree 22(43.1%), undecided 3(5.9%) , disagree 22(43.1%) and strongly disagree 2(3.9%) ; Suddenly giving answers to questions without being called [7] strongly agree 1(2%), agree 28(54.9%), undecided 4(7.8%), disagree 15(29.4%) and strongly disagree 3(5.9%); Shifting from one task to another without finishing [8] strongly agree 5(9.8%), agree 21(41.2%), undecided 3(5.9%), disagree 19(37.3%) and strongly disagree 3(5.9%); Make careless mistakes [9] strongly agree 2(3.9%), agree 21(41.2%), undecided 4(7.8%), disagree 21(41.2%) and strongly disagree 3(5.9%); Fail to give close attention to details [10] strongly

agree 4(7.8%), agree23(45.1%), undecided 3(5.9%), disagree19(37.3%) and strongly disagree2(3.9%); Daydreaming during lecture and other activity [11] strongly agree 4(7.8%), agree18(35.3%), undecided 4(7.8%), disagree18(35.3%) and strongly disagree7(13.7%) ; Difficulty organizing assignments [12] strongly agree2(3.9%), agree15(29.4 %) , undecided 4(7.8 %), disagree28(54.9%) and strongly agree2(3.9%).

Based on this, have difficulty staying seated or playing quietly is the first item with 78.4% of the participant were agree on it, will appear fidgety is the second with 76.5% and act as driven by a force is the third with 60.7% of the participant were agree on it. Difficulty organizing assignments, daydreaming during lecture, difficulty participating tasks that require taking turns and make careless mistakes are the items agreed by smallest number of participants respectively. The remaining items are also agreed by below fifty percent of the participants. Thus half and above percent of the participant were undecided and disagreed on the items.

The result indicates that majority of the characteristics of children with ADHD are not clear for teachers. This implies that teachers do not have awareness regarding these children. Regarding this one of the teacher said the following *“I was punishing the child who exhibits odd behavior because I didn’t know the major characteristics of the problem but, I perceived that the child should have behavior problem and he should correct it by himself. I didn’t have any information about the criteria to identify such children.”*

One of the teacher describe one of the child as: *“he get out of the class till I get out, when I give exercise he returns an incomplete work, he never staying seated quietly in the class and even never give attention to the lesson. I tried to give him advice but I don’t know how he can be treated. And I don’t know the root cause of the problem.*

One of the special needs education professional stated that, *“we didn’t provide and training concerning children with ADHD for teachers. Due to this most of the teachers let the students get out of the class when they show odd behavior and even they take a corporal punishment and negligence on such students.”*

According to the report from Centers for Disease Control and Prevention (2015) in William and Mary T/TAC (2017) ADHD is most commonly diagnosed in children thus, teachers should be aware of the characteristics and developmental problems to adjust possible solutions.

4.2.2. The effect of ADHD on School Performance

Twelve specific items were included to the questionnaire to assess teachers' awareness regarding the effect of ADHD on school performance. The percentage frequency for each items is described respectively below: Fail to understand or follow rules [1] strongly agree 3(5.9%), agree 19(37.3%), undecided 2(3.9%), disagree 25(49%) and strongly disagree 2(3.9%); Fail to complete required tasks [2] strongly agree 2(3.9%), agree 30(58.8%), undecided 4(7.8%), disagree 15(29.4%), and strongly disagree 0(0%); Frequent classroom disruptions [3] strongly agree 2(3.9%), agree 24(47.1%), undecided 3(5.9%), disagree 18(35.3%) and strongly disagree 4(7.8%); Read words without attention to meaning [4] strongly agree 3(5.9%), agree 19(37.3%), undecided 5(9.8%), disagree 21(41.2%) and strongly disagree 3(5.9%); Have difficulty with writing [5] strongly agree 4(7.8%), agree 21(41.2%), undecided 6(11.8%), disagree 17(33.3%) and strongly disagree 3(5.9%); May have difficulty remembering mathematical facts and procedures [6] strongly agree 2(3.9%), agree 21(41.2%), undecided 7(13.7%), disagree 15(29.4%) and strongly disagree 6(11.8%).

As indicated on description of analysis above, fail to complete required tasks, frequent classroom disruptions and have difficulty with writing are the items agreed by 62.7%, 51% and 49% of the participants respectively. Fail to understand or follow rules, read words without attention to meaning and have difficulty remembering mathematical facts are items agreed by 43.2%, 43.2% and 45.1% of the participant. Thus most of the participants didn't agree on these items. Teachers should familiar with the frequent problems that the student with ADHD faced inside and outside the classroom. But the result indicates that the teachers are not familiar with most of the related effects of ADHD on the children.

One of the principal said that: *'there are some students who fail to complete their required tasks and most of the time the teacher send them to us. But they don't have regular contact with the parents to have detail information about the problem.'*

As sited in Alberta Education Staff (pp2); students with AD/HD frequently struggle in academic areas. About 30 to 50 percent¹ of these as students also have learning disabilities. Even those

without learning disabilities frequently experience difficulties in reading, writing and mathematics because of difficulties related to attention and short-term memory. Students with AD/HD may have strong decoding and word recognition skills but struggle with recall and comprehension of reading material because of a tendency to skim read or word-read without attention to meaning. Many students with AD/HD have difficulty with writing. Common difficulties include spelling, editing, self-monitoring, and generating, planning and organizing ideas. Underdeveloped fine motor skills may contribute to difficulty with the physical act of writing legibly with speed and precision. These difficulties may result in fatigue, inefficiency and frustration. A hasty approach to a task can also affect legibility. Students with AD/HD may have difficulty remembering math facts and procedures. Inconsistent performance may also be due to careless errors (e.g., failure to notice operational signs) and neglect of self-monitoring strategies. Slow and inefficient copying and misaligning of numbers may also interfere with success in math.

Supporting this, the report from the U.S Department of Education (2003) found that students with ADHD, compared to students without ADHD, had persistent academic difficulties manifested in: lower average marks, more failed grades, more expulsions, increased dropout rates, and a lower rate of college undergraduate completion (Weiss & Hechtman as cited in Johnston, 2002; Ingersoll, 1988). ADHD is also associated with reduced school performance and academic achievement (APA, 2013).

4.2.3. Identification of Children with ADHD

The questionnaire contained seventeen items specified to identify children with ADHD. Teachers were asked to show their level of agreement on such items. The result from each item is described based on percentage frequencies below: Often fails to give close attention, make careless mistakes [1] strongly agree 1(2%), agree 31(60.8%), undecided 2(3.9%), disagree 16(31.4%), and strongly disagree 1(2%); Often have difficulty sustaining, attention in tasks[2] strongly agree2(3.9%), agree25(49%), undecided2(3.9%), disagree18(35.3%) and strongly disagree4(7.8%); Often does not seem to listen when spoken directly [3] strongly agree2(3.9%), agree24(47.1%), undecided6(11.8%),disagree15(29.4%) and strongly disagree4(7.8%); often does not follow through on instructions and fails to finish work [4] strongly agree2(3.9%), agree24(47.1%), undecided 5(9.8%), disagree 15(29.4%) and strongly disagree 5(9.8%); Often

has difficulty organizing tasks and activities [5] strongly agree 3(5.9%), agree22(43.1%), undecided5(9.8%), disagree20(39.2%) and strongly disagree1(2%); Often loses things necessary for tasks or activities [6] strongly agree4(7.8%), agree 21(41.2%), undecided5(9.8%), disagree15(29.4%) and strongly disagree6(11.8%); Often easily distracted by extraneous stimuli [7] strongly agree4(7.8%), agree15(29.4%), undecided8(15.7%), disagree 22 (43.1%) and strongly disagree2(3.9%) ; Is often forgetful in daily activities [8] strongly agree2(3.9%), agree14(27.5%), undecided5(9.8%), disagree25(49%) and strongly disagree 5(9.8%); Often leaves seat in the classroom or in other situations [9] strongly agree3(5.9%), agree21(41.2%), undecided3(5.9%), disagree24(47.1%) and strongly disagree0(0%); Often fidgets with hands or feet or squirms in seat [10] strongly agree1(2%), agree19(37.3%), undecided3(5.9%), disagree23(45.1%) and strongly disagree5(9.8%); Often runs about or climbs excessively in inappropriate situations [11] strongly agree3(5.9%), agree18(35.3%), undecided10(19.6%), disagree17(33.3%) and strongly disagree3(5.9%); often has difficulty playing in leisure activities quietly[12] strongly agree 0(0%), agree 18(35.3%), undecided4(7.8%), disagree24(47.1%) and strongly disagree5(9.8%); is often acts as driven by a motor [13] strongly agree0(0%), agree23(45.1%), undecided6(11.8%), disagree20(39.2%) and strongly disagree2(3.9%); Often talks excessively [14] strongly agree2(3.9%), agree22(43.1%), undecided5(9.8%), disagree20(39.2%) and strongly disagree2(3.9%); Often suddenly give answers to questions without being called [15] strongly agree0(0%), agree16(31.4%), undecided7(13.7%), disagree25(49 %) and strongly disagree 3(5.9%); Often has difficulty awaiting turn [16] strongly agree3(5.9%), agree13(25.5%), undecided5(9.8%), disagree29(56.9%) and strongly disagree1(2%); Often interrupts or intrudes on others [17] strongly agree3(5.9%), agree23(45.1%), undecided2(3.9%), disagree20(39.2%) and strongly disagree3(5.9%).

The result indicated that often fails to give close attention and often have difficulty sustaining attention in tasks are the leading items with 62.8% and 52.9% of the participants were agreed respectively. The other three items often interrupts on others, don't seem to listen when spoken to directly and often have difficulty organizing tasks were agreed by 51% of the participant each. The items often blurt out answers before questions have been completed, often has difficulty waiting turn and often forgetful in daily activities were agreed by minimum number of

participants 31.4% each. The item often has difficulty playing in leisure time and often runs about were agreed by was agreed by 35.3% Of the participant. The remaining other items were also agreed by below fifty percent of the participant. This indicates that most of the specific indicators of the identification characteristics of children with ADHD are not familiar with the teachers.

One of the special needs educations professional said the following: *‘teachers can identify the cases or problems of their children; but, they can’t diagnose the problems using specific criteria’. This leads them to criticize and label the child in a wrong way. For instance the teacher labeled one of a child with ADHD as having chronic mental illness because of a hyperactive and inattentive behavior of the child.’*

According to Alberta Education; the observations of parents and teachers are key to accurately identifying students who are experiencing difficulties that may be attributed to AD/HD. Initial concerns may come from parents, teachers or students themselves (pp7). But, teachers don’t contact with parents to provide information concerning their child’ problem. Regarding this one of the parents stated: *‘I don’t contact with the teachers most of the time because I don’t undermined that I can help them. Sometimes they told me that my child has odd behavior. And I told them to punish him.’*

ADHD is one of the most commonly diagnosed conditions of children (Centers for Disease Control and Prevention, 2015). The diagnostic term attention deficit/hyperactivity disorder (ADHD) refers to individuals who display patterns of inattention, impulsivity, and overactive behavior that interfere with daily functioning (American Psychiatric Association [APA], 2013). The Diagnostic and Statistical Manual (DSM) V (APA, 2013) criteria for diagnosing ADHD list three types of ADHD and the accompanying characteristics.

- 1. Predominantly inattentive type:** The student may: submit inaccurate or incomplete work, have difficulty attending to conversations, activities, or tasks, be easily distracted, have difficulty following directions, frequently lose materials, and/or have difficulty organizing tasks and materials.
- 2. Predominantly hyperactive/impulsive type:** The student may: appear to be in constant motion, frequently fidget or move in his or her seat, o become restless during quiet activities, leave his or her seat when expected to remain seated, interrupt others and

classroom activities, o talk excessively, and/or fail to follow classroom procedures (e.g., blurt out answers without raising hand).

- 3. Combined type:** The student may exhibit symptoms that include behaviors from both categories above.

In order for a student to be diagnosed with ADHD, symptoms must appear before age 12 and be exhibited across at least two settings. They must also have adverse effects on academic performance, occupational success, or social-emotional development (APA, 2013). To add to the complexity of the diagnosis, children with ADHD are likely to have co-existing emotional, behavioral, developmental, learning, or physical conditions (Wolraich & DuPaul, 2010).

4.2.4. The Support for Children with ADHD

Thirteen specific items were included in the questionnaire to assess teachers' awareness regarding the support for children with ADHD. The results of percentage and frequency is described below as: Evaluate the child's individual needs and strengths [1] strongly agree1 (2%), agree1(33.3%), undecided3(5.9%), disagree25(49%) and strongly disagree5(9.8%); Select appropriate instructional practices [2] stronglyagree0(0%), agree20(39.2%), undecided9(17.6%), disagree22(43.1%) and strongly disagree0(0%); Integrate appropriate practices with an IEP [3] strongly agree3(5.9%), agree16(31.4%), undecided4(7.8%), disagree28(54.9%) and strongly disagree0(0%); Using effective instructional strategies [4] strongly agree6(11.8%), agree15(29.4%), undecided5(9.8%), disagree23(45.1%) and strongly disagree2(3.9%); Use carefully structured academic lessons [5] strongly agree1(2%), agree20(39.2%), undecided10(19.6%), disagree20(39.2%) and strongly disagree0(0%); Conducting the most productive lessons for the children [6] strongly agree0(0%), agree16(31.4%), undecided6(11.8%), disagree27(52.9%) and strongly disagree2(3.9%); Conclude the lessons by providing advance warning that the lesson is about to end [7] strongly agree2(3.9%), agree23(45.1%), undecided9(17.6%), disagree14(27.5%) and strongly disagree3(5.9%); Individualize the instructional practices in accordance with different academic subjects and the needs of the students [8] strongly agree4(7.8%), agree29(56.9%), undecided13(25.5%), disagree4(7.8%) and strongly disagree1(2%); Provide organizational and study skills useful for academic instructions [9] strongly agree3(5.9%), agree28(54.9%), undecided5(9.8%), disagree12 (23.5%) and strongly disagree3(5.9%); Use effective behavioral intervention techniques [10]

strongly agree6(11.8%), agree23(45.1%), undecided10(19.6%), disagree10 (19.6%) and strongly disagree2(3.9% Classroom accommodations [11] strongly agree2(3.9%), agree30(58.8%), undecided8(15.7%), disagree10(19.6%), and strongly disagree1(2%); Determine special classroom seating arrangements [12] strongly agree8(15.7%) , agree20(39.2%), undecided9(17.6%), disagree10 (19.6%) and strongly disagree4(7.8%); Use special instructional tools to modify the classroom learning environment [13] strongly agree12(23.5%), agree23(45.1%), undecided5(9.8%), disagree8(15.7%) and strongly disagree3(5.9%).

The description of percentage frequencies above indicates teachers' level of agreement regarding the support for children with ADHD. In this table there were thirteen items provided for teachers. From these the items agreed by maximum number of participants respectively are: use special instructional tools to modify the classroom learning environment 68.6%, individualize the instructional practices in accordance with different academic subjects 64.7%, classroom accommodations 62.75 and provide organizational and study skills useful for academic instructions with 60.8%. Conducting the most productive lessons for the children 31.4%, integrate appropriate practices with an IEP 37.3. %,evaluate the child's individual needs and strengths 35.3% and Select appropriate instructional practices with 39.2% were items agreed by small number of participants respectively. The remaining other items also were agreed by below fifty percent of the participant.

Teachers should be offered practical information and sample strategies that can be used to help students with AD/HD manage learning so that school is a successful and satisfying experience for them and their families. But the result indicates that the teachers were not familiar with the management approaches for supporting students with ADHD. Concerning this one of the teacher stated the following; *'I don't understand what ADHD is, how it can affect the student and how I can support the student to manage his/her ADHD. There was one of a student who frequently blurts out answers before questions have been completed. I advised him to avoid such behavior but he didn't and sometimes I left him outside the class.'*

The researcher also observed that teachers are not informed with the effective strategies to support children with ADHD. As stated by U.S. Department of Education (pp4 available in HS97017002), teachers who are successful in educating children with ADHD use a three-pronged strategy. They begin by identifying the unique needs of the child. For example, the teacher determines how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects different educational practices associated with academic instruction, behavioral interventions, and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class.

4.2.5. The Challenges in Teaching Children with ADHD

To assess the teachers' awareness regarding the challenges they faced in teaching children with ADHD seven specific items were included in the questionnaire. The frequency distribution for the items based on teachers' response is described as follows: Misconceptions about the nature of the problem [1] strongly agree 13(25.5%), agree 26(51%), undecided 2(3.9%), disagree 8(15.7%) and strongly disagree 2(3.9%); Lack of information about the ideal method for dealing with the children with ADHD [2] strongly agree 12(23.5%), agree 20(39.2%), undecided 3(5.9%), disagree 14(27.5%), strongly disagree 2(3.9%); Children's inability to follow classroom rules [3] strongly agree 10(19.6%), agree 31(60.8%), undecided 2(3.9%), disagree 6(11.8%) and strongly disagree 2(3.9%); Inattention and impulsivity [4] strongly agree 4(7.8%), agree 25(49%), undecided 7(13.7%), disagree 14(27.5%) and strongly disagree 1(2%); Lack of time and materials or resources to support [5] strongly agree 11(21.6%), agree 18(35.3%), undecided 1(2%), disagree 17(33.3%) and strongly disagree 4(7.8%); Lack of support for responsible bodies [6] strongly agree 14(27.5%), agree 18(35.3%), undecided 7(13.7%), disagree 10(19.6%) and strongly disagree 2(3.9%); Burden of having the children with ADHD in the class [7] strongly agree 12(23.5%), agree 26(51%), undecided 5(9.8%), disagree 7(13.7%) and strongly disagree 1(2%).

As indicated above, the three items children's inability to follow classroom rules, misconceptions about the nature of the problem and burden of having children with ADHD in

the class were agreed by 80.4%, 76.5% and 74.5% of the participants respectively. The remaining other items were also agreed by above fifty percent of the participants. This indicates that teachers faced such challenges in teaching children with ADHD.

One of the teacher said; *'I don't have any information about this problem and how to help this children. Sometimes the inability of the child to follow classroom rules enforced me to perceive that it is a burden of having this child in the class.'*

Similarly another teacher said; *'there is no any support from other concerned bodies to manage the problem. Even the parents don't contact us to provide information. And what surprise me is that the principals and counselors don't provide us information concerning the problem.'*

CHAPTER FIVE

5. Discussion of the Major Findings

In this chapter, the findings of the study were discussed and interpreted in relation to different literatures and previous research findings in the area. Accordingly, the discussion is based on research questions formulated in the statement of the problem. While discussing each major theme, the data obtained from the instruments were utilized to make the analysis reliable and valid.

5.1. Characteristics of children with ADHD

The result indicated that majority of the characteristics of children with ADHD are not clear for teachers. This implies that teachers do not have awareness regarding these children. Different literatures reported that when selecting and implementing successful instructional strategies and practices, it is imperative to understand the characteristics of the child, including those pertaining to disabilities or diagnoses. This knowledge will necessarily be important in the evaluation and implementation of successful practices, which are often the same practices that benefit students without ADHD. One of the SPNE professional said that *'teachers do not have any information regarding the major characteristics of students with ADHD and related coexistent problems. Due to this students with ADHD are not identified.'*

This is supported by different studies. The previous studied replied the following; although many children have only ADHD, others have additional academic or behavioral diagnoses. For instance, it has been documented that approximately quarters to one-third of all children with ADHD also have learning disabilities (Forness & Kavale, 2001; Robelia, 1997; Schiller, 1996), with studies finding populations where the comorbidity ranges from 7 to 92 percent (DuPaul & Stoner, 1994; Osman, 2000). Likewise, children with ADHD have coexisting psychiatric disorders at a much higher rate.

The Alberta Education expressed this problem as: *There are many characteristics that might indicate AD/HD. They vary from individual to individual, and in individuals, from age to age and from situation to situation. Generally, the characteristics are clustered under the general*

categories of inattention, hyperactivity, impulsivity, social-emotional difficulties and the overarching category of executive functions.

5.2. Effect of ADHD on school performance

As the finding indicated that, fail to complete required tasks, frequent classroom disruptions and have difficulty with writing are the items agreed by 62.7%, 51% and 49% of the participants respectively. Fail to understand or follow rules, read words without attention to meaning and have difficulty remembering mathematical facts are items agreed by 43.2%, 43.2% and 45.1% of the participant. Thus most of the participants didn't agree on these items. From this it is possible to conclude that teachers are not familiar with the frequent problems that the student with ADHD faced inside and outside the classroom.

According to the U.S Department of Education, Students with ADHD usually are identified only after consistently demonstrating academic failure, frequent classroom disruptions or poor academic performance and this can be challenging for them. These students may have persistent academic difficulties that resulted in the: lower average marks, more failed grades, more expulsions, increased dropout rates, and a lower rate of college undergraduate completion (Weiss & Hechtman as cited in Johnston, 2002; Ingersoll, 1988). The core symptoms of symptoms of: inattention, hyperactivity, and impulsivity make meeting the daily rigors of school challenging for the child (Zentall, 1993). The student with ADHD may to miss important details in assignments, daydreaming during lectures and other activities, and difficulty organizing assignments due to inattentive behavior. Hyperactivity may lead to expressed verbal or physical disruptions in class. Impulsivity may lead to careless errors, responding to questions without fully formulating the best answers, and only attending to activities that are entertaining or novel. In general, students with ADHD may experience more problems with school performance than their nondisabled peers.

The inattentive, impulsive and overactive behaviors also lead to a variety of problems within the school setting. These students often experience difficulties in the behavioral components needed for academic success, such as interacting with others, paying attention, staying seated, starting and completing tasks, following directions, producing consistent work, working independently in the classroom, and keeping track of books, pencils, and assignments (Barkley, 1990; Taylor &

Larson, 1998). In particular, students with ADHD are unable to maintain attention for long periods of time, or to sustain a persistent work

5.3. Identification of children with ADHD

The study indicated that most of the specific indicators of the identification characteristics of children with ADHD are not familiar with the teachers. Most of the major identification characteristics of ADHD were agreed by a small percentage of participants.

One of the special needs education professional said the following: *'teachers can identify the cases or problems of their children; but, they can't diagnose the problems using specific criteria.'* This leads them to criticize and label the child in a wrong way. For instance the teacher labeled one of a child with ADHD as having chronic mental illness because of a hyperactive and inattentive behavior of the child.'

According to Alberta Education; the observations of parents and teachers are key to accurately identifying students who are experiencing difficulties that may be attributed to AD/HD. Initial concerns may come from parents, teachers or students themselves (pp7). But, teachers don't contact with parents to provide information concerning their child's problem. Regarding this one of the parents stated: *'I don't contact with the teachers most of the time because I don't undermined that I can help them. Sometimes they told me that my child has odd behavior. And I told them to punish him.'*

ADHD is one of the most commonly diagnosed conditions of children (Centers for Disease Control and Prevention, 2015). The diagnostic term attention deficit/hyperactivity disorder (ADHD) refers to individuals who display patterns of inattention, impulsivity, and overactive behavior that interfere with daily functioning (American Psychiatric Association [APA], 2013). The Diagnostic and Statistical Manual (DSM) V (APA, 2013) criteria for diagnosing ADHD list three types of ADHD and the accompanying characteristics.

As suggested in Alberta Education the , a multidisciplinary team approach is preferred because of the complex nature of the disorder, the high probability of coexisting conditions and the potential for multiple causes of AD/HD symptoms. A thorough assessment of AD/HD will include interviews, observations, and rating scales and psych educational testing.

In order for a student to be diagnosed with ADHD, symptoms must appear before age 12 and be exhibited across at least two settings. They must also have adverse effects on academic performance, occupational success, or social-emotional development (APA, 2013). To add to

the complexity of the diagnosis, children with ADHD are likely to have co-existing emotional, behavioral, developmental, learning, or physical conditions (Wolraich & DuPaul, 2010).

5.4. The Support for children with ADHD

Most of the important strategies for helping children with ADHD are not clear for teachers. Thus the items agreed by maximum number of participants respectively are: use special instructional tools to modify the classroom learning environment 68.6%, individualize the instructional practices in accordance with different academic subjects 64.7%, classroom accommodations 62.75 and provide organizational and study skills useful for academic instructions with 60.8%. Conducting the most productive lessons for the children 31.4%, integrate appropriate practices with an IEP 37.3. %, evaluate the child's individual needs and strengths 35.3% and Select appropriate instructional practices with 39.2% were items agreed by small number of participants respectively. The remaining other items also were agreed by below fifty percent of the participant.

Teachers should be offered practical information and sample strategies that can be used to help students with AD/HD manage learning so that school is a successful and satisfying experience for them and their families. But the result indicates that the teachers were not familiar with the management approaches for supporting students with ADHD. Concerning this one of the teacher stated the following; *'I don't understand what ADHD is, how it can affect the student and how I can support the student to manage his/her ADHD. There was one of a student who frequently blurts out answers before questions have been completed. I advised him to avoid such behavior but he didn't and sometimes I left him outside the class.'*

The researcher also observed that teachers are not informed with the effective strategies to support children with ADHD. As stated by U.S. Department of Education (pp4 available in HS97017002), teachers who are successful in educating children with ADHD use a three-pronged strategy. They begin by identifying the unique needs of the child. For example, the teacher determines how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects different educational practices associated with academic instruction,

behavioral interventions, and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class.

School interventions should include a team approach across multiple settings, consisting of both preventive and intervention strategies. Interventions must be based upon assessment data that includes information about the student's strengths and needs as well as the environmental conditions in which her characteristics of ADHD occur. Progress monitoring and strategy adjustments are critical to the success of any intervention plan (Wolraich & DuPaul, 2010).

There are a variety of management approaches for supporting individuals with AD/HD. For students with AD/HD to be successful, it is essential that parents, school staff and other important individuals in their lives understand what AD/HD is, how it can affect the individual and how they can support that individual to manage his or her AD/HD. The following are strategies for supporting students with AD/HD suggested in the Alberta Education.

Teachers who are successful in educating children with ADHD use a three-pronged strategy. They begin by identifying the unique needs of the child. For example, the teacher determines how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects different educational practices associated with academic instruction, behavioral interventions, and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class. The three-pronged strategy, in summary, is as follows:

4. **Evaluate the child's individual needs and strengths.** Assess the unique educational needs and strengths of a child with ADHD in the class. Working with a multidisciplinary team and the child's parents, consider both academic and behavioral needs, using formal diagnostic assessments and informal classroom observations. Assessments, such as learning style inventories, can be used to determine children's strengths and enable

instruction to build on their existing abilities. The settings and contexts in which challenging behaviors occur should be considered in the evaluation.

5. **Select appropriate instructional practices.** Determine which instructional practices will meet the academic and behavioral needs identified for the child. Select practices that fit the content, are age appropriate, and gain the attention of the child.
6. **For children receiving special education services, integrate appropriate practices within an IEP.** In consultation with other educators and parents, an IEP should be created to reflect annual goals and the special education related services, along with supplementary aids and services necessary for attaining those goals. Plan how to integrate the educational activities provided to other children in your class with those selected for the child with ADHD.

Because no two children with ADHD are alike, it is important to keep in mind that no single educational program, practice, or setting will be best for all children. The following are the suggested Successful integrated implementation programs for children with ADHD (U.S. Department of Education 2008):

5.5. The challenges of teaching children with ADHD

As indicated on table five above, the three items children's in ability to follow classroom rules, misconceptions about the nature of the problem and burden of having children with ADHD in the class were agreed by 80.4%, 76.5% and 74.5% of the participants respectively. The remaining other items were also agreed by above fifty percent of the participants. This indicates that teachers faced such challenges in teaching children with ADHD.

One of the teacher said; *'I don't have any information about this problem and how to help this children. Sometimes the inability of the child to follow classroom rules enforced me to perceive that it is a burden of having this child in the class.'*

Similarly another teacher said; *'there is no any support from other concerned bodies to manage the problem. Even the parents don't contact us to provide information. And what surprise me is that the principals and counselors don't provide us information concerning the problem.'*

the effective educational and behavioral management children with ADHD present a professional challenge to their teachers. Thus, management of these students makes the long

term process of teaching them much easier. Supporting these researchers suggested that universities should add ADHD diagnostic procedures and remediation techniques to the education curriculum and accurate perceptions of the difficulties experienced by children with ADHD should also be of central concern in teacher training programs (Mioduser, Margalit, & Efrati, 1998). The knowledge of teachers about ADHD helps in the early identification and effective classroom techniques which enhances behavior modification programs followed at home (Sloan et al., 1999). If the new teacher is better prepared he/she can deal with children with ADHD effectively and cope with the challenge (McFarland et al., 1995).

Because of the nature of the disorder and the problems that ensue, ADHD is regarded by teachers, parents and the community as both perplexing and frustrating. The teacher with an ADHD student in their classroom is faced with a heterogeneous set of problems (Forlin, 1995). ADHD can therefore be regarded as one of the most significant disorders confronting child and adolescent psychiatrists, parents and teachers (Cantwell, 1996; Carragher, 1999; Dunne et al., 1997). The report from Mioduser et al. (1998) concluded that the foundation of a teacher's theoretical knowledge of ADHD is acquired at university, and the classroom provides the day to day reality which teachers require to shape this knowledge into practice. Teachers can benefit from formal training to eliminate any gaps in their knowledge (Jerome et al., 1994). Therefore training is important for teachers to prepare themselves and work effectively dealing students with ADHD.

CHAPTER SIX

This part of the study deals with the summary, conclusions and recommendations of the findings of the study. The first part deals with the summary of the study based on methods and findings. The second part is about the conclusion that is made based on the results of the study and the discussions made so far. The third part focuses on the recommendations of the research which are forwarded based on the summary and the conclusion reached so far.

6. Summary, Conclusion and Recommendations

6.1. Summary

The objective of the study was to assess primary school teachers' awareness and practice regarding children with ADHD at three selected schools of Akaki Kaliti Subcity. The schools were Kaliti Bulbula primary school, Ethio Korea primary school and Hibret Chibo primary school. Accordingly, the following basic research questions were proposed in the present study: Are there students with ADHD in the schools? How teachers perceive children with ADHD? , What is the practice in identifying and supporting children with ADHD in the schools? , What are the challenges faced by teachers in teaching children with ADHD in the schools? In order to find out answers for the above research questions the researcher selected 56 teachers using stratified sampling. These were 30% of the population.

In addition 3 school directors, 1 cluster supervisor, 3 guidance and counselors, 2 special needs education professionals, 3 students with ADHD and their parents were selected purposively. Therefore totally 71 participants were included for the study. The data was collected from these samples through data collection tools. A 5-point likert scale questionnaire was adopted from available scales. The questionnaire consisted of demographic, close ended questionnaire. The demographic characteristics consisted of 6 items indicate their sex, age, years of service, qualification, current school they teach and trainings. The collected data were analyzed using quantitative and qualitative method.

From the inspection of the data analysis, the following findings were obtained.

1. It was found that there are considerable amount of students with ADHD who are enrolled and attending their education at the selected schools (from grade 1-8) along with their peers.

2. However, the major specific characteristics of these children are not recognized and familiar with the school teachers and parents as well as school principals.
3. Ultimately, the specific effects of ADHD on schools performance has not been identified and responded. Rather, the diverse needs of these children are overlooked and these students were imposed to correct themselves.
4. Teachers are not familiar with the specific identification characteristic criteria to identify children with ADHD. Thus the presence of children with ADHD is by and large ignored and remains unnoticed. Most of the teachers didn't take any training regarding children with ADHD. Thus most of the teachers are not familiar with the specific strategies to support the children with ADHD.
5. However, there are still some opportunities in the schools. For instance, the presence of SPNE professionals and counselors was found to be opportunities that could be maximally exploited.

6.2. Conclusion

The findings of the study revealed that the teachers have lack of awareness and practice regarding children with attention deficit hyperactivity disorder. This presents great challenges to parents, teachers, peers and the school in general and directly affects children social interactions and academic performance. Because of lack of adequate knowledge and training among teachers about the disorder and on how to manage and teach these children, unavailability of the necessary facilities and support and lack of collaborative work the schools in general and classroom teachers in particular are not ready to accommodate the educational and social needs of these children.

As these children grow up into adulthood without being provided with the necessary and sufficient educational and social support, their current problems may become worsen and chronic enough leading them to school failure and drop out of schooling .

6.3. Recommendations

1. Students with ADHD should be identified and supported early as much as possible.
2. Teachers should take trainings regarding the children with ADHD that helps them the need to be familiar with nature and characteristics of the problem. of ADHD in order to guide treatment.

3. The schools should adopt early and accurate identification of students with ADHD to provide required adaptations and accommodations. Thus, teachers should develop a collaborative work with professionals and develop expert observational skills to be familiar with age appropriate norms for behavior which help them assist parents and medical specialists in the process of diagnosis (including identification and assessment) and treatment of ADHD.
4. Teachers must get up to date information, which explains the characteristics nature of ADHD and the likely response of affected children.
5. There should be in-service training to teachers regarding the possible strategies to identify and teach children with ADHD. This helps teachers get more appropriate professional preparation to address the needs of students with ADHD inside and outside the classrooms.

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APPENDICES

Appendix-I

Addis Ababa University
College of Education and Behavioral Studies
Department of Special Needs Education
Questions to be filled by teachers

This questionnaire is designed to collect data for the study entitled *Primary school Teachers Awareness and Practice regarding children with Attention Deficit Disorder Hyperactivity in case of three selected schools at Akaki Kaliti Sub city*. Therefore the purpose of this questionnaire is to gather relevant data on the identification, assessment and support at these schools. The result of this study thus, depends on the truthfulness and frankness of your own responses. The researcher would like to assure you that your responses are strictly confidential. Hence your cordial response is guaranteed with absolute confidentiality.

Thank you in advance for your kind cooperation.

The questionnaire consists of two parts

- I. Demographic details
- II. Close ended items

Directions : Dear teachers please read carefully the instructions below before starting to fill the questionnaire.

- Writing your name is not mandatory.
- Note that all questions have equal importance to attain the objective of the study. Therefore please try to answer all the questions.

Part One : Demographic data

Direction: Please completes the following section by putting a tick mark (√) in the box or providing answer.

1. School -----
2. Current grade you teach-----
3. Sex Female Male
4. Age 20-30 31-40 41-50 51 and above
5. Qualification Certificate Diploma Degree MA and above
6. Years of experience 1-3 years 4-6 years 7-9 years 10 and above years
7. Training on ADHD YES N

Part Two: Questions related to the awareness and practice of teachers regarding children with ADHD.

Direction Please show your level of agreement or disagreement by putting a tick mark √ on one of the options available for each of the items in the following table.

If you strongly agree, put a tick mark √ under S.A, strongly agree

If you agree, put a tick mark √ under A, agree

If you uncertain, put a tick mark √ under U, uncertain

If you disagree, put a tick mark √ under D.A, disagree

If you strongly disagree, put a tick mark √ under S.D.A, strongly disagree

8. Select your level of agreement by putting a tick mark (✓) about the characteristics of children with ADHD.

No.	Items	S.A	A.	U	D.A	S.D.A
1	Submit inaccurate or incomplete work					
2	Have difficulty attending to conversations, activities or tasks					
3	Have difficulty staying seated or playing quietly					
4	Will appear fidgety					
5	Act as if driven by a motor					
6	Difficult participating in tasks that require taking turns					
7	Blurting out answers to questions instead of waiting to be called					
8	Shifting from one task to another without finishing					
9	Make careless mistakes					
10	Fail to give close attention to details					
11	Daydreaming during lecture and other activity					
12	Difficulty organizing assignments					

9. Select your level of agreement by putting a tick mark (✓) about the effect of ADHD on school performance.

No.	Items	S.A	A.	U	D.A	S.D.A
1	Fail to understand or follow rules					
2	Fail to complete required tasks					
3	Frequent classroom disruptions					
4	Read words without attention to meaning					
5	Have difficulty with writing					
6	May have difficulty remembering mathematical facts and procedures					

10. Select your level of agreement by putting a tick mark (✓) for the following identification points.

No.	Items	S.A	A.	U	D.A	S.D.A
1	Often fails to give close attention , make careless mistakes					
2	Often have difficulty sustaining, attention in tasks					
3	Often does not seem to listen when spoken directly					
4	Often does not follow through on instructions and fails to finish school work					
5	Often has difficulty organizing tasks and activities					
6	Often loses things necessary for tasks or activities					
7	Often easily distracted by extraneous stimuli					
8	Is often forgetful in daily activities					
9	Often leaves seat in the classroom or in other situations					
10	Often fidgets with hands or feet or squirms in seat					
11	Often runs about or climbs excessively in inappropriate situations					
12	Often has difficulty playing or engaging in leisure activities quietly					
13	Is often on the go or acts as driven by a motor					
14	Often talks excessively					
15	Often blurts out answers before questions have been completed					
16	Often has difficulty awaiting turn					
17	Often interrupts or intrudes on others					

11. Select your level of agreement by putting a tick mark \surd about the support for children with ADHD.

No.	Items	S.A	A.	U	D.A	S.D.A
1	Evaluate the child's individual needs and strengths					
2	Select appropriate instructional practices					
3	Integrate appropriate practices with an IEP					
4	Using effective instructional strategies					
5	Use carefully structured academic lessons					
6	Conducting the most productive lessons for the children					
7	Conclude the lessons by providing advance warning that the lesson is about to end.					
8	Individualize the instructional practices in accordance with different academic subjects and the needs of the students					
9	Provide organizational and study skills useful for academic instructions					
10	Use effective behavioral intervention techniques					
11	Classroom accommodations					
12	Determine special classroom seating arrangements					
13	Use special instructional tools to modify the classroom learning environment					

12. Select your level of agreement by putting a tick mark (\surd) about the challenges you faced to teach children with ADHD.

No.	Items	S.A	A.	U	D.A	S.D.A
1	Misconceptions about the nature of the problem					
2	Lack of information about the ideal method for dealing with the children with ADHD					
3	Children's inability to follow classroom rules					
4	Inattention and impulsivity					
5	Lack of time and materials or resources to support					
6	Lack of support for responsible bodies					
7	Burden of having the children with ADHD in the class					

Appendix-II

Teachers and Parents Rating Scale (TPRS)

Childs Name ----- Sex-----Age-----Grade-----

Completed by-----School-----Class-----

For each item check the column which describes the child		Not at all	Just a little	Quite a little	Very much
		0	1	2	3
1	Often fails to give close attention to details or makes careless mistakes				
2	Often has difficulty sustaining attention in tasks or play activities				
3	Often does not seem to listen when spoken to directly				
4	Often does not follow through on instructions and fails to finish school work, chores or duties				
5	Often has difficulty organizing tasks and activities				
6	Often avoids, dislikes or reluctantly engages in tasks requiring sustained mental effort.				
7	Often losses things necessary for activities e.g. pencils, books, school assignments				
8	Often is distracted by extraneous stimuli				
9	Often is forgetful in daily activities				
10	Often fidgets with hands or felt or squirms in seat				
11	Often leaves seat in classroom or in other situations in which remaining seat is expected				
12	Often runs about or climbs excessively				
13	Often has difficulty playing or engaging in leisure activities quietly				
14	Often is on the go or acts if driven by a motor				
15	Often talks excessively				
16	Often blurts out answers before questions have been completed				
17	Often has difficulty awaiting turn				
18	Often interrupts or intrudes on others				

Appendix-III

Observation Check Lists

A. Observation Checklist for the Case ADHD

Name of Observer----- Name of observed -----
 Place of observation----- Activities observed-----
 Date ----- Observation interval -----
 School ----- Time beginning-----Time ending-----

No.	Symptoms to be observed	Occurrence of symptom		Dimensions of the symptom to be observed			
		Never	Yes observed	Durat ion	frequ ency	laten cy	inten sity
1	Fidgeting with hands or feet or squiring in his/her seat						
2	Difficulty remaining seated when requires to do so						
3	Difficulty sustaining attention						
4	Difficulty waiting for a turn in tasks						
5	Blurting out answers to questions before questions have been completed						
6	Difficulty following through on instructions						
7	Difficulty in organizing tasks						
8	Shifting from one unfinished activity to an other						
9	Failing to give close attention to details						
10	Losing things necessary for tasks or activities						
11	Difficulty in listening to others without being distracted or interrupting						
12	Wide ranges in mood swings						
13	Great difficulty in delaying gratification						

B. Observation Checklist for The Teachers practice

Name of the observer-----
 Place of observation-----
 Date of observation-----
 School-----

Name of Observed -----
 Sex -----
 Qualification-----
 Experience -----
 Activity observed-----

Skills to be observed	Observation interval		
	Frequency		
	Never	Sometimes	always
1. Behavioral intervention			
1.1. The teacher provide a verbal reinforcement or praise for desired behavior			
1.2. Define the appropriate behavior while giving praise			
1.3. Giving praise immediately			
1.4. Varying the statements given as praise			
1.5. Consistency and sincere with praise			
1.6. selectively ignore in appropriate behavior			
1.7. Allow for escape value			
2. Academic instructions			
2.1. Providing advance organizer			
2.2. Review previous lessons			
2.3. Set learning expectations			
2.4. Set behavioral expectations			
2.5. State needed materials			
2.6. Explain additional resources			
2.7. Support the students participation in the classroom			
2.8. Use audiovisual materials			
2.9. Check student performance			
2.10. Ask probing questions			
2.11. Perform student ongoing evaluation			
2.12. Help students correct their own mistakes			
2.13. Divide work in to smaller units			
2.14. Highlight key points			
2.15. Use cooperative learning strategies			
2.16. Provide advance warnings in concluding lesson			
2.17. Check assignments			
2.18. Preview the next lesson			
3. Individualizing instructional practices			
4. Provide organizational and study skills useful for academic instruction			
5. Assisting the students with time management			
6. Use appropriate classroom accommodations			
7. Use appropriate instructional tools			

Appendix-IV

Semi structured Interview Guides

A. Semi structured Interview Guide prepared for teachers

The main purpose of this study is to assess the primary school teachers' awareness and practice regarding children with ADHD. Be sure that your responses are kept confidential and used only for academic purpose. Therefore, you are kindly requested to give your genuine responses.

Would you mind I use the tape recorder to record the information that you will give?

Thank you in advance for your cooperation

Interview date----- Time -----Place-----

I. Back ground information of the interviewee

Sex ----- Education ----- Total service years-----

Field of study----- School-----

II. Information concerning the awareness and practice regarding children with ADHD.

1. Do you have any trainings or courses in relation to identification and assessment of children with ADHD?
2. Are there students with ADHD in your class?
3. What are the major behavior characteristics these children exhibits in the classroom?
4. Do the children exhibits theses odd behavior consistently? If so how often?
5. Would you list the major criteria to identify these children in the regular classroom?
6. What supportive measures do you take in response to the students' behavior problem?
7. Have you faced any challenge in managing and teaching the children in the classroom? If so please mention them
8. How often you contact and provide information to parents concerning the child's behavior problems? And what response or feedback have you got from them?
9. What other things do you explain more?

B. Semi structured Interview Guide prepared for parents

The main purpose of this study is to assess the primary school teachers' awareness and practice regarding children with ADHD. Be sure that your responses are kept confidential and used only for academic purpose. Therefore, you are kindly requested to give your genuine responses.

Would you mind I use the tape recorder to record the information that you will give?

Thank you in advance for your cooperation

Interview date----- Time -----Place-----

I. Back ground information of the interviewee

Age -----Sex ----- Education level -----Profession-----

School-----

II. Information concerning child with ADHD.

1. What is your child's full name, age and grade level?
2. What is your relationship with the child?
3. How is the education achievement of your child?
4. What types of odd behaviors do you observe on your child?
5. Does your child exhibit all these odd behaviors always?

6. To what extent do you believe that these symptoms affect your child's social life?
7. How do you feel and react towards your child's odd behaviors?
8. What kinds of educational and social support do you provide to your child?
9. For how many times you have contacted with the school teachers due to your child's behavior?
10. What kind of support your child and you have got from the teachers?
11. Do you have anything to explain more?

C. Semi structured interview guide prepared for counselors and special needs education professionals

The main purpose of this study is to assess the primary school teachers' awareness and practice regarding children with ADHD. Be sure that your responses are kept confidential and used only for academic purpose. Therefore, you are kindly requested to give your genuine responses.

Would you mind I use the tape recorder to record the information that you will give?

Thank you in advance for your cooperation

Interview date----- Time -----Place-----

I. Back ground information of the interviewee

Sex ----- Education ----- Total service years-----

Field of study----- School-----

II. Information concerning the awareness and practice regarding children with ADHD.

1. Did you provide any training concerning children with ADHD for teachers?
2. Are there students with ADHD in your school?
3. What are the major behavior characteristics these children exhibits?
4. What impacts do you observe that these odd behaviors affect the students' educational performance?
5. How teachers do identify children with such types of symptoms as possible? How they developed any identification mechanism?
6. Do the teachers contact and provide information to you concerning the children behavior problem?
7. What measures do the teachers take in response to the students' behavior problem?
8. What major challenges do the teachers have in managing and teaching the children?
9. What other things do you explain more?

D. Semi structured Interview Guide prepared for school directors and supervisors

The main purpose of this study is to assess the primary school teachers' awareness and practice regarding children with ADHD. Be sure that your responses are kept confidential and used only for academic purpose. Therefore, you are kindly requested to give your genuine responses.

Would you mind I use the tape recorder to record the information that you will give?

Thank you in advance for your cooperation

Interview date----- Time -----Place-----

I. Back ground information of the interviewee

Sex ----- Education ----- Total service years-----

Field of study----- School-----

II. Information concerning the awareness and practice regarding children with ADHD.

1. Did you take any trainings or courses in relation to identification and assessment of children with ADHD?
2. Are there students with ADHD in your school?
3. What are the major behavior characteristics these children exhibits?
4. What impacts do you observe that these odd behaviors affect the students' educational performance?
5. How teachers do identify children with such types of symptoms as possible? How they developed any identification mechanism?
6. What supportive measures do the teachers take in response to the students' behavior problem?
7. What major challenges do the teachers have in managing and teaching the children in the classroom?
8. How often the teachers contact and provide information to parents concerning the child's behavior problems?
9. What other things do you explain more?

Appendix-V
Amharic Version of the questionnaire

አዲስ አበባ ዩኒቨርሲቲ
የትምህርትና ባህሪ ጥናት ኮሌጅ
የልዩ ፍላጎት ትምህርት ክፍል

በመምህራን የሚሞላ የጽሑፍ መጠይቅ

ይህ የጽሑፍ መጠይቅ የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸውን ተማሪዎች በተመለከተ የመጀመሪያ ደረጃ ትምህርት ቤት መምህራን ያላቸው ግንዛቤና ልጆችን የመለየትና የመደገፍ ተግባር በተመለከተ ጥናት ለማካሄድ የተዘጋጀ ነው። የጥናቱ ዓላማ መምህራን የዚህ ዓይነት ችግር ያለባቸውን ተማሪዎች ለመለየትና ድጋፍ ለማድረግ የሚገጥሟቸውን ችግሮች መለየትና የመፍትሄ ሃሳብ ማስቀመጥ ነው። ስለዚህ የዚህ መጠይቅ ዓላማ የዚህ ዓይነት ችግር ያለባቸውን ተማሪዎች የመለየት ሂደት፣ የመከታተልና ተገቢ ድጋፍ ማድረግን በተመለከተ ትክክለኛ መረጃ መሰብሰብ ነው። የዚህ ጥናት ወጤት እርስዎ በሚሞሉት መረጃ ትክክለኛነትና ግልፅነት ላይ የተመሰረተ በመሆኑ መረጃውን በጥንቃቄ እንዲሞሉ በትኩረትና እጥረት ለመስጠት መረጃውን በትክክልና በግልጽ በመሙላት ምንም ዓይነት የተለየ ጉዳት ወይም ችግር የማደርስብዎ መሆኑን እንገልጻለን።

ለትብብርዎ በቅድሚያ እናመሰግናለን!!

መጠይቁ ሁለት ክፍሎች ያሉት ሲሆን፡

- የመጀመሪያው ክፍል አጠቃላይ መረጃዎችን በተመለከተ ነው፤፤
- ክፍል ሁለት ደግሞ የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸውን ተማሪዎች መለየትና ድግፍ

የተከበሩ መምህር/ት እባክዎ ጥያቄውን መስራት ከመጀመርዎ በፊት ትእዛዙን በጥንቃቄ ያንብቡ።

- ሥም መጻፍ አያስፈልገዎ
- ሁሉም ጥያቄዎች የጥናቱን ዓላማ ለማሳካት እኩል ጥቅም ያላቸውን አስፈላጊዎች በመሆናቸው እባክዎ ሁሉንም ጥያቄዎች ለመመለስ ጥረት ያድርጉ።

ክፍል አንድ:- አጠቃላይ መረጃዎች

ከተራ ቁጥር1-2 ለቀረቡ ጥያቄዎች ተስማሚውን መልስ በመሙላት እና ከ3-7 ለቀረቡት ጥያቄዎች ደግሞ ከተሰቱት አማራጮቹ ያምርጩ በሳጥኑ ውስጥ የራዬት ምልክት (√) በማድረግ ምረጡ

1. አሁን የሚያስተምሩበት ትምህርት ቤት-----
2. አሁን የሚያስተምሩበት የክፍል ደረጃ-----
3. ያታ ወንድ ሴት
4. ዕድሜ 20-30 ዓመት 31-40ዓመት 41-50ዓመት 51 እና በላይ
5. የትምህርት ደረጃ ሰርተፊኬት ዲፕሎማ ዲግሪ ማስተርስና በላይ
6. የሥራ-ልምድ 1-3ዓመት 4-6ዓመት 7-9ዓመት 10ዓመትናበላይ
7. የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸውን ተማሪዎች በተመለከተ ሥልጠና ወስደዋል?
አዎ የለም

ክፍል ሁለት፡

የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸውን ልጆች በተመለከተ የቀረቡ ጥያቄዎች እባክዎ ትኩረት ማነስና መቁነጥነጥ ችግር ያለባቸውን ልጆች በተመለከተ ከታች በቀረቡት ጥያቄዎች ላይ እስማማለው ወይም አልስማማም የሚለውን በእርስዎ እይታ የራይት ምልክት (✓) በማድረግ በደረጃ ያስቀምጡ፡፡

መልስዎ በጣም እስማማለሁ ከሆነ በጣም እስማማለሁ የሚለው ላይ የራይት ምልክት (✓) ያድርጉ

መልስዎ እስማማለሁ ከሆነ እስማማለሁ የሚለው ላይ የራይት ምልክት (✓) ያድርጉ

መልስዎ አላውቅም ከሆነ አላውቅም የሚለው ላይ የራይት ምልክት (✓) ያድርጉ

መልስዎ አልስማማም ከሆነ አልስማማም የሚለው ላይ የራይት ምልክት (✓) ያድርጉ

መልስዎ በጣም አልስማማም ከሆነ በጣም አልስማማም የሚለው ላይ የራይት ምልክት (✓) ያድርጉ

8. የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸው ልጆች መገለጫ (የሚያሳዩት ባህርያት) በተመለከተ በእርስዎ እይታ ትክክል የሆነውን የረይት ምልክት(✓) በማድረግ በደረጃ ይምረጡ፡፡

ተ.ቁ	ዓይነት	በጣም እስማማለሁ	እስማማለሁ	አላውቅም	አልስማማም	በጣም አልስማማም
1	የተሰጣቸውን ሥራ ሳያስተካክሉና ሳያጠናቅቁ ይመልሳሉ					
2	ጭጭጭጭና ሌሎች ድርጊቶች ለመከታተል ይከብዳቸዋል					
3	አንድ ቦታ ላይ አርፎ መቀመጥ አይችሉም					
4	ይቁነጥኑ					
5	ይወራጫሉ					
6	በተለያዩ ተግባራት ላይ ተራቸውን መጠበቅ አይችሉም					
7	ጥያቄዎች ሲጠየቁ እድል እስኪሰጣቸው አይጠብቁም					
8	አንድን ተግባር ሳያጠናቅቁ ወደሌላ ይሄዳሉ					
9	በግዴልሽነት ስህተቶችን ይሰራሉ					
10	ጠለቅ ያለ ማብራሪያ የሚሹ ነገሮችን መከታተል ያዳግታቸዋል					
11	በትምህርት ሰዓት የመቃጠት ሁኔታ ይታይባቸዋል					
12	የሚሰጡ የተግባር ሥራዎችን ለማድረግ ይከብዳቸዋል					

9. የትኩረት ማነስና የመቁነጥነጥ ችግር በትምህርት አቀባበልና ወጤታማነት ላይ የሚያደርሰውን ተጽእኖ በተመለከተ በእርስዎ እይታ ትክክል የሆነውን የረይት ምልክት(✓) በማድረግ በደረጃ ይምረጡ፡፡

ተ. ቁ	ዓይነት	በጣም እስማማለሁ	እስማማለሁ	አላወቅም	አልስማማም	በጣም አልስማማም
1	ደንቦችንና ሕጎችን የመረዳትና የመተግበር ችግር አለባቸው					
2	የሚጠበቅባቸውን ተግባር ለመፈጸም አይሳካላቸውም					
3	በክፍል ውስጥ በተደጋጋሚ ይበጠብጣሉ					
4	የቃላትን ትርጉም ምንነት ሳይረዱ(ያለትኩረት) ያነባሉ					
5	በትክክል መጻፍ ይከብዳቸዋል					
6	ሒሳባዊ ሀቆችንና ቅደምተከተሎችን ለማስታወስ ይከብዳቸዋል					

10. የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸውን ልጆች ለመለየት የሚያስችሉ ነጥቦችን በተመለከተ በእርስዎ እይታ ትክክል የሆነውን የረይት ምልክት(✓) በማድረግ በደረጃ ይምረጡ፡፡

ተ.ቁ	ዓይነት	በጣም እስማማለሁ	እስማማለሁ	አላወቅም	አልስማማም	በጣም አልስማማም
1	ብዙ ጊዜ ትኩረት አለመስጠትና በግዴላ ሽንት ስህተትን መስራት					
2	ብዙውን ጊዜ የተሰጣቸው ተግባር ላይ ትኩረት አድርገው መቆየት ይከብዳቸዋል					
3	በሚነገራቸው ጊዜ የማዳመጥ ፍላጎት አይታይባቸውም					
4	ብዙውን ጊዜ መመሪያዎችን ስለማይከተሉ ተግባራትን የት/ቤት አያጠናቅቁም					
5	ብዙውን ጊዜ ሥራዎችን ለማቀናጀትና ለማደራጀት ይከብዳቸዋል					
6	ለትምህርት የሚያስፈልጉ መሠረታዊ ነገሮችን ጥለው ይመጣሉ					
7	በባእድ ነገሮች በቀላሉ ይረበሻሉ					
8	ብዙ ጊዜ የእለት-ተእለት ተግባራቸውን ይዘነጋሉ					
9	ብዙ ጊዜ በመቀመጫ ቦታቸው አርፈው አይቀመጡም					
10	ብዙ ጊዜ እጃቸውን ያወራጫሉ					
11	ብዙ ጊዜ አላስፈላጊ ቦታዎች ላይ የመሯሯጥና የመንጠልጠል ሁኔታ ይታይባቸዋል					
12	ብዙ ጊዜ የጨዋታ ሰዓታቸውን በእርጋታ ማሳለፍ አይችሉም					
13	ብዙ ጊዜ የመውራጨትና የመሯሯጥ ሁኔታ ይታይባቸዋል					
14	ብዙ ጊዜ ከመጠን በላይ የወራሉ					
15	ጥያቄዎች ከመጠየቃቸው በፊት ሳይፈቀድላቸው መልስ አምልጧቸው ይመልሳሉ					
16	ብዙ ጊዜ ተራ መጠበቅ ይከብዳቸዋል					
17	ብዙ ጊዜ በሌሎች ላይ ጣልቃ ይገባሉ					

11. የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸውን ተማሪዎች ለመደገፍ የተዘረዘሩ ነጥቦችን በተመለከተ በእርስዎ እይታ ትክክል የሆነውን የረይት ምልክት(√) በማድረግ በደረጃ ይምረጡ፡፡

ተ.ቁ	ዓይነት	በጣም እስማማለሁ	እስማማለሁ	አላወቅም	አልስማማም	በጣም አልስማማም
1	የልጁ/ቷ/ መሠረታዊ ፍላጎትና ጥንካሬ መገምገም					
2	ተስማሚ የማስተማር ተግባርን መምረጥ					
3	ተስማሚውን የማስተማር ተጋባር ከነፍሰወከፍ ትምህርት ጋር ማሳለጥ					
4	ዉ.ጤ.ታ.ማ የማስተማር ዘዴዎችን መጠቀም					
5	በጥንቃቄ የተዘጋጀ የትምህርት እቅድ መጠቀም					
6	ለልጁ/ቷ/ በጣም ጠቃሚ የሆነውን ርዕስ መለየት					
7	የእለቱ ትምህርት ከመጠናቀቁ በፊት እየተጠናቀቀ መሆኑን አስቀድሞ ማስጠንቀቅ					
8	የመማር ማስተማር ሂደቱ የተማሪዎችን ግላዊ ፍላጎት መሠረት ባደረገ መልኩ ማሳለጥ					
9	ለትምህርቱ ጠቃሚ የሆነና የተደራጀ የጥናት ክህሎት ማዘጋጀት					
10	ዉ.ጤ.ታ.ማ የባህርይ ማሻሻያ ዘዴዎችን መጠቀም					
11	የመማሪያ ክፍሉን ተስማሚ ማድረግ					
12	የተለየ የክፍል ዉስጥ አቀማመጥን ማድረግ					
13	የክፍል ዉስጥ የመማር ማስተማሪያ ሂደቱን ለማሻሻል ልዩ የማስተማሪያ ዘዴዎችን መጠቀም					

12. የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸው ተማሪዎችን ለማስተማር እንቅፋት የሚሆኑ ነገሮችን በተመለከተ በእርስዎ እይታ ትክክል የሆነውን የረይት ምልክት(√) በማድረግ በደረጃ ይምረጡ፡፡

ተ.ቁ	ዓይነት	በጣም እስማማለሁ	እስማማለሁ	አላወቅም	አልስማማም	በጣም አልስማማም
1	ስለ ችግሩ ያለን የግንዛቤ እጥረት					
2	የትኩረት ማነስና የመቁነጥነጥ ችግር ያለባቸው ተማሪዎች ጋር በምን ዓይነት ዘዴ መግባባት እንዳለብን አለመውቅ					
3	ተማሪዎች የክፍል ዉስጥ ደንቦችና መመሪያዎችን መከተል አለመቻል					
4	የትኩረት ማነስና ችኩልነት					
5	ልጆቹን ለመደገፍ የጊዜና የቁሳቁስ እጥረት መኖር					
6	ከሚመለከታቸው አካላት ተገቢ ድጋፍ አለመኖሩ					
7	እነዚህ ተማሪዎች በክፍል ዉስጥ መኖራቸው ጫና መኖራቸው					

በመምህራንና በወላጆች የሚሞላ ተማሪዎችን ለመለየት የተዘጋጀ ቅጽ

የተማሪው/ዋ/ ስም----- የታ-----ዕድሜ----- ክፍል-----

መረጃውን የሞላው ስም----- ትምህርት ቤት----- ክፍል-----

በሰንጠረዥ የተሰጡት አማራጮች ልጁን/ቷን/ የሚገልጹ መሆናቸውን የራይት ምልክት (✓) በማድረግ በደረጃ ይምረጡ		የለም	በትንሹ	በመጠኑ	በብዛት
		0	1	2	3
1	ብዙጊዜ ትኩረት አለመስጠትና በግዴላሽነት ስህተትን መስራት				
2	ብዙውንጊዜ አንድ ተግባር ላይ ትኩረት አድርገው መቆየት አይችልም/አትችልም/				
3	በሚነገራቸው ጊዜ የማዳመጥ ፍላጎት አይታይባቸውም				
4	ብዙውን ጊዜ መመሪያዎችን ስለማይከተል/ስለማትከተል/ የት/ቤት ተግባራትን አያጠናቅቅም/አታጠናቅቅም/				
5	ብዙውንጊዜ ሥራዎችን ለማቀናጀትና ለማደራጀት ይከብደዋል /ይከብዳታል/				
6	ለትምህርት የሚያስፈልጉ መሠረታዊ ነገሮችን ጥለው መጣል				
7	ብዙ ጊዜ ተለቅ ያለ የአእምሮ ምርምር የሚሹ ተግባራትን አይወድም/አትወድም/				
8	በባእድ ነገሮች በቀላሉ መረበሽ/መጨነቅ/				
9	ብዙጊዜ የእለት-ተእለት ተግባራትን መዘንጋት				
10	ብዙጊዜ በመቀመጫ ቦታ አርፎ አለመቀመጥ				
11	ብዙጊዜ እጅን ማወራጨት				
12	ብዙጊዜ አላስፈላጊ ቦታዎች ላይ የመሯሯጥና የመንጠልጠል ሁኔታ				
13	ብዙጊዜ የጨዋታ ሰዓትን በእርጋታ ማሳለፍ አለመቻል				
14	ብዙ ጊዜ የመወራጨትና የመሯሯጥ ሁኔታ				
15	ብዙ ጊዜ ከመጠን በላይ ማወራራት				
16	ጥያቄዎች ከመጠየቃቸው በፊት ሳይፈቀድ መልስ መመለስ				
17	ብዙ ጊዜ ተራ መጠበቅ አለመቻል				
18	ብዙ ጊዜ በሌሎች ላይ ጣልቃ መግባት				