CHAPTER I

INTRODUCTION

1.1 Rationale for the study

Attention Deficit Hyperactivity Disorder (ADHD) has been recognized as a serious medical and behavioral condition. It has been recognized since George Still's series of lectures to the Royal College of Physicians in 1902. [1] ADHD is the most frequently encountered pediatric neuro-developmental disorder [2] and is the most common childhood behavioral complaint presenting to pediatricians and family physicians. Recent reports indicated that in addition to a rise in the percentage of mental health visits to primary care physicians for ADHD, sizable increases occurred in the use of diagnostic and treatment services during 1990. [3-6] ADHD is an important disorder because it is the most prevalent chronic health condition affecting school aged children. [7]

The prevalence of Attention-deficit/hyperactivity disorder (ADHD) varies between 3% to 7% of children in the United States. It is one of the most prevalent disorders in the school – aged children. Study in 2002 found that 5.44% of children were diagnosed as ADHD. [7] From 2001 to 2004, 2.4 million children aged 8 to 15 years old in the United States met Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria for ADHD in the year prior to the survey. [8] The prevalence of ADHD in Europe and North America varied between 2% - 14% of children. [9], The prevalence of ADHD is 9.4% in the state of Qatar [10] In 1998, the prevalence of children with ADHD is approximately 5% in Thailand. [11] A study about prevalence and clinical characteristics of ADHD among primary school students in Bangkok in 2002, found that prevalence of ADHD is 6.5%. [12] The prevalence of ADHD in Thailand is increasing. Most studies found that ADHD affected approximately 3 – 5% of school-age children. [13-16] ADHD was previously thought those children eventually outgrows. The recent study found that 30 – 60% of affected individuals continue to show significant symptoms of the disorder into adulthood. [17]

ADHD occures much more frequent in males than in females. The reports indicate that many more male children demonstrate ADHD than do female children. Proportions range between 3:1 (male:female). [18]

According to the most recent version of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV), there are three patterns of behavior that indicate ADHD. DSM-IV contains two symtoms groups: inattentive and hyperactive–impulsive. [19] The principle characteristics of ADHD are inattention, hyperactivity and impulsivity. These symptoms appear early in a child's life. Many normal children may have these symptoms, but at a low level, or the symptoms may be caused by another disorder, therefore, it is important that children should receive a thorough examination and appropriate diagnosis by a well-qualified professional. Children with ADHD are easily recognized in the clinics, schools, and home but difficult to be recognized by biochemical laboratory test. Symptoms of ADHD oftenly are impulsiveness and hyperactivity preceding symptoms of inattention. Different symptoms may appear differently in different situations. Symptoms may affect the children's self-control. Their inattention leads to daydreaming, distractibility and difficulties in sustaining effort on a single task for a prolonged period. Their impulsivity makes them accident prone, creates problems with peers and disrupts classrooms. Their hyperactivity often manifest as fidgeting and excessive talking in schools and is frustrating to parents who can easily lose them in crowds and cannot get them to sleep at a reasonable hour. [20]

The current Clinical Practice Guideline of treatment of school–aged children with ADHD developed by the American Academy of Pediatrics suggests that the combination therapies among stimulant medication, behavior modification and combination therapies are the most effective treatment for the core symptoms of ADHD and related with solving academic and behavioral problems. [20-21]

The guideline contains recommendations for the treatment of children with ADHD as following:

1. Primary care clinicians should establish a treatment program that recognizes ADHD as a chronic condition.

2. The treating clinician, guardians and children in collaboration with school personnel should specify appropriate target outcomes to guide the management.

3. The clinician should recommend stimulant medication and/or behavior therapy as appropriate to improve target outcomes in children with ADHD.

4. When the selected management for children with ADHD has not met target outcomes, clinicians should evaluate the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and presence of coexisting conditions.

5. The clinician should periodically provide a systematic follow-up for the children with ADHD. Monitoring should be directed to target outcomes and adverse effects with information gathered from parents, teachers, and children.

This guideline is intended for use by primary care clinicians for the management of children between 6 and 12 years of age with ADHD. The guideline will assist primary care clinicians in treatment. Many of recommendations may apply to children with coexisting conditions. This guideline use for ADHD children without major coexisting conditions including mental retardation, pervasive developmental disorder, moderate to severe sensory deficits such as visual and hearing impairment, chronic disorders associated with medications that may affect behavior. This guideline is not intended as a sole source of guidance for treating children with ADHD. Rather, it is designed to assist the primary care clinician by providing a framework for decision-making. It is also not intended to replace clinical judgment or to establish a protocol for all children with this condition. [22]

Primary care clinician cannot work alone in the treatment of school age children with ADHD. On-going communication with guardian, teacher and other school – based professionals is necessary to monitor the progress and effectiveness of specific intervintions. Guardians are key persons in management plan as sources of information and as the children's primary superintendence. In addition, coping strategies of guardians and teachers are importance for helping children with ADHD too. Early recognition, assessment, and management of this condition can redirect the educational and psychosocial development of most children with ADHD. [19,23]

Teachers or guardians' knowledge of ADHD is very importance because it may affect the quality of ADHD treatment and coping strategies.

Late recognition, assessment, and management of ADHD may impact many aspects of individual's life such as the risk for academic difficulties, [24] behavior problems [12] including social skill problems [25] and parent – child relationships. [26] Their peers or people around them frequently reject children with ADHD at the first day of contact because of their tendency toward disruptive and aggressive behavior. [27]

In the school, children with ADHD often have problems in sustaining attention to a effortful task. Their completion of independent seatwork is quite inconsistent. Their performance on classwork also may be compromised by a lack of attention to task instructions. Teachers and guardians frequently report that children with ADHD have low academically achievement compared to their classmates [18]

Other academic problems associated with attention problems include poor test performance. Almost 80 % of children with ADHD have been found to exhibit adademic performance problem [28]; deficient study skill; disorganized notebooks, desks, and written reports; and a lack of attention to teacher lectures and / or group discussion. Children with ADHD have fewer opportunities to respond to acadenic material and complete less independent work than their classmates. [29]

Children with ADHD often disrupt classroom activities, and thus disturb the learning of their classmates. For example, children with ADHD may exhibit impulsibity in a variety of ways, including frequent calling out without permission, talking with classmates at inappropriate time, and becoming angry when comfronted with reprimands of frustrating tasks. Classwork and homework accuracy also may be affected deleteriously due to an impulsive, careless response style on these tasks.

In-class problems related to overactivity include children leaving their seats without permission. Playing with inappropriate objects (e.g., materials in desk that are unrelated to the task at hand), repetitive tapping of hands and feet, and fidgetion their chairs. Although the latter behaviors may appear relatively benign, when they occur frequently they can serve as a signigicant disruption to classroom instruction

The robust correlation between hyperactivity and aggression is well documented in the research literatures. [30-31] Problems of aggression most frequently

associated with ADHD include defiance or noncompliance with authority figure commands, poor temper control, and argumentativeness and verbal hostility, which presently comprise the psychiatric category of oppositional defiant disorder. [19]

Children with ADHD may develop depression, lack of self–esteem, and other emotional problems. Children with ADHD who untreated have higher rates of injury than normal children did. ADHD problem frequently occurs with other problems such as depression and anxiety disorders, conduct disorders. [13] Children with ADHD are high risk of experiencing social problems ranging from increased teenage pregnancy, criminal behavior, and substance abuse to antisocial behavior. [19, 32-33] Children with ADHD, particularly at the secondary school level exhibited more serious antisocial behaviors (e.g., stealing, physical aggression, and truancy) by 25 %. [34-35] Drivers with ADHD increase the risks of traffic violations, especially speeding, and are considered to be at fault in more traffic accidents. [36] A lot of study has been suggested that treatments may have a positive effect on driving skills and may decreased traffic accidents. Furthermore, new studies confirm that ADHD is a risk factor for alcohol problems and parental alcoholism and stressful experiences in the family as they get older. [37]

1.2 Research Questions

1. What are the problem of ADHD children toward their guardians and teachers?
2. What are the self-management strategies of teachers and their guardian for helping children with ADHD?

1.3 Research Objectives

1. To study problems of ADHD children toward their guardians and classroom
2. To study the self management strategies of guardians and teachers for helping children with ADHD

1.4 Significance of the study

The result of this study will provide social cognitive information in guardians and teachers who have children with ADHD in their responsibility. This information can be used for guiding and improving self-management strategies of guardians and teachers. Beside that this information can be used for designing appropriate ADHD treatment for individual children to benefit children with ADHD and decrease problems related to ADHD patients in society and improve human ability of ADHD patients.

1.5 Limitation

Populations in this study are guardians and teachers of children with ADHD. We purposively selected participant guardians and teachers who had children with ADHD in their classroom and work in primary schools in Amphoe Muang, Samutprakarn province. Primary schools selected in this study were Pranylvaschara school, Anubanwatpichaisongkarm school, Watdansumrong school, Bangnangkreng school and Watsukakorn school. The result of this study, therefore, may not be able to apply to the whole population in other provinces or other countries. However, the results can be used as a guide to deal with children with ADHD.