

PAPERS PRESENTED AT

The 5th Congress of the Asia Pacific Association of Psychotherapists

Listening to the Heart of the East

April 5-7, 2008

Four Seasons Hotel, Jakarta - Indonesia

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These, of course, require further investigation in order to provide a complete and more comprehensive description of child abuse in Surabaya.

THE MAP OF CHILD ABUSE IN SURABAYA

Regardless the school category, physical abuse was found to be the type of abuse that was frequently experienced by the children. Whereas social abuse that involved neglect and exploitation was a familiar scene witnessed by the children. However, as the study indicated, in these two cases children were in general prone to any types of abuse, that was the children could experience and witness either physical, mental, social or sexual abuses.

Children studying in all of the three school categories were likely to experience physical abuse, and they had a greater opportunity for witnessing social abuse such as neglect and exploitation. In HI-schools, the children particularly experienced frequent sexual abuse than that of social, which in the case of LI- and MI-schools, the condition were the opposite. In HI-schools, the children were more likely to witness physical abuse than mental abuse. In the case of LI- and MI-schools, the opposite condition applied.

Person who committed child abuse is likely to be a person with whom the children spent most of their time, which as the study revealed is different from one school category to another. In the case of LI-schools, grandmother was the committed individual. In MI-school, schoolmate and friend were highly rated as the committed abuse. Finally in the case of HI-school the nanny, which do not come by surprise, was the individual who committed abuse.

How to Understand and Handle Handwriting Difficulties Encountered by Students with Attention Defisit and Hyperactivity Disorder (ADHD)

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1. HANDWRITING DIFFICULTIES ASSOCIATED WITH ADHD

According to Mercer (1983), handwriting, of course, must be legible. Thus, instruction begins by focusing on holding the writing instrument, forming manuscript and cursive letters correctly, and maintaining proper spacing and proportion when writing. In line with Hildreth (1947), Mercer (1983) lists numerous factors contributing to handwriting difficulties as motor problems, emotional problems, faulty visual perception of letters and words, and poor visual memory. The additional factor includes poor instruction or lack of motivation.

Fine motor problems can also interfere handwriting, and thus schoolwork. For example, a child may know how to spell a word but he is unable to write with enough legibility and speed to keep up with the teacher; thus, his spelling evaluation may be poor. The same situation may exist in copying material from the chalkboard and working on seatwork activities. Unfortunately, many parents and / or teachers view the students as academically slow when, in fact, the real problem is handwriting.

Students with ADHD show a variety of handwriting problems as slowness, incorrect direction of letters and numbers, too much or too little slant, spacing, messiness, inability to stay horizontal, illegible letters, too much or too little pressure, and mirror writing.

According to Reiff (2003), handwriting difficulties is manifested because the process requires the following skills :

a. Grapho-motor skills

Many children with ADHD and / or learning disabilities have impairments in grapho-motor skills. This affects the physical task of writing and organizing print on the page. They often have trouble with:

1. Writing neatly on or within the given lines.
2. Spacing / organizing their writing on the page.
3. Copying from the board or book onto paper.
4. With fine-motor skills, causing the act of handwriting to be very inefficient, fatiguing, and frustrating (affecting pencil grip, pressure exerted, legibility).
5. Executing print or cursive with precision or speed

Memory is also involved in fine- motor skills (remembering with automaticity the sequence of fine motor movements required in the formation of each letter). Those with coexisting learning disabilities in visual processing also frequently reverse or invert letters (b/d, p/q, n/u) and form numerals / letters in strange, awkward ways.

b. Spelling

Students with attention difficulties are often inattentive to visual detail, and do not notice or recall the letters, sequence, or visual patterns within words and prone to make many careless mistakes. Those who also have learning disabilities are typically weak in spelling due to :

1. Auditory-sequential memory deficits (causing great difficulty learning letter - sound associations, as well as hearing / remembering and writing those sounds in the correct order.
2. Visual-sequential memory (causing them difficulty recalling the way a word looks, and getting it down in the correct order/sequence). This results in misspelling common high-frequency words (said, they, because) that cannot be sounded out phonetically and must be recalled by sight.

c. Speed or written output and production

Some students with ADHD who rush through writing assignments are often lead to illegible work with many careless errors. Others with ADHD write excruciatingly slow. Although they know the answers and can verbally express their thoughts and ideas articulately, they are unable to put more than a few words or sentences on paper. Needless to say, this is extremely frustrating. Part of the problem with speed output may be due to :

1. Impairments in impulsivity and inhibition.
2. Difficulty sustaining attention to task and maintaining the mental energy required in written expression.
3. Grapho-motor dysfunction.

In line with the mentioned theory, Nanik's research (2004) found out similar weaknesses in handwriting performance encountered by students with ADHD. The students with ADHD - the participants of the research were 10 boys aged 6 - 12 years old and they were given intelligence test of Wechsler Intelligence Children Scale (WISC). They got low score in some WISC subtests. Ranked from the lowest score, they were Object Assembly, Picture Arrangement, Information, Comprehension, Digit Span, and Block Design. The data was interpreted according to Glasser and Zimmerman, Ogdon Sattler, and Jose³/Goewens reference. The score of the subtests reflected those children's limited capacity in visual-motor coordination, visual-perception organization, visual spatial relationship and field dependene, sequencing, planning, effects of uncertainty, and social sensitivity. The limitations were associated with the dysfunction of the brain right hemisphere as seen in table 1.

Table 1. The identification of *Right Hemisphere Dysfunction* (Glasser, 1967)

No.	Aspect
1	IQ V > IQ P ($\Delta = \pm / \geq 10$ point)
2	Low Score in Object Assembly
3	Low Score in Picture Arrangement
4	Low Score in Digit Span
5	Low Score in Block Design

The dysfunction of the right hemisphere may cause certain disorders as seen in table 2.

Table 2. Right hemisphere learning disorders (Pennington, 1991)

Primary	Specific problems in math/handwriting/art
Correlated	Problems in social cognition, attention, conceptual skills
Secondary	Opposition to written work, spelling problems, depression, social withdrawal.
Artifactual	Dyslexia

Table 3. The Description of the Result of Observing the Dictation Test and Copy Sentence of the Students with ADHD (Nanik, 2004)

No.	The characteristic of handwriting problem of the students with ADHD	Description
1	The quality of bad handwriting.	The bad handwriting is the handwriting disorder arrangement and unclear, illegible letters.
2	Space.	The interwords distance is too close, even sometimes the interwords have no space.
3	The mistake / replacement of word in writing.	They often write the wrong words or write the words which are different with the words which are dictated and copied
4	The missing of letter / syllable / word in writing.	They often write letters / syllable in the words and write words in the sentence incompletely.
5	The problem with capitalization.	They don't concern with the differences of using capital and lower case letter. They often write capital letters in the middle of words.
6	The missing of punctuation	They often write senteces without full stop.

2. ASSESSEMENT OF HANDWRITING SKILLS

2.1. Published assessment devices

To assess a student's overall readiness to learn writing, the writing section of the Basic School Skills Inventory - Diagnostic may be used. The scale assesses a child's handwriting ability in various tasks : writing from left to right, grasping a pencil, writing first name, maintaining proper writing position, writing letters upon request, copying words, copying from chalkboard to paper, staying on the line, and writing last name. The instrument is norm-referenced (4 to 6 years 11 months). The scale also shows what skills need to be taught (Hammill & Leigh, 1983 in Mercer, 1983).

2.2. Informal assessment

The following are informal assessment which could be done by the teacher (Mercer, 1983).

2.2.1. The teacher should note possible problem areas. They are :

- a. Does the student grip the pencil correctly and in a comfortable and flexible manner?
- b. Is the student's paper in the proper position on the writing surface?
- c. Does the student sit correctly when writing, or does she hold her head too close or too far away from the paper?
- d. Does the student consistently use the same hand for writing?
- e. Does the student appear extremely frustrated, nervous, or emotional when writing?
- f. Does the student have a negative attitude toward handwriting and appear bored and disruptive?

2.2.2. The teacher then focuses on error patterns . They are :

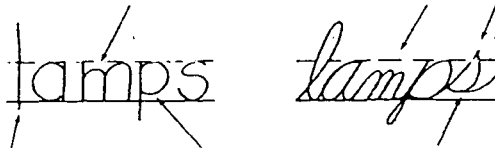
a. Letter formation

To check letter formation, the teacher uses a piece of cardboard with a hole slightly larger than a single letter cut in the center. By exposing one letter at a time, it is easy to see which letters are illegible or poorly formed.



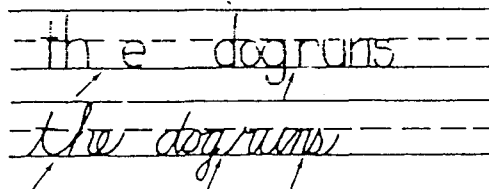
b. Letter size, proportion, and alignment

The size and proportion of letters are indicated by their height relationship between one and another; alignment refers to evenness of letters along the baseline, with letters of the same size being the same height. These legibility elements can be measured by using a ruler to draw lines that touch the base and tops of as many letters as possible.



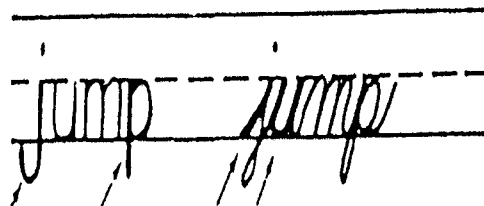
c. Spacing

There should be consistent spacing among letters within words, as well as among words and within a sentence and among sentences within a paragraph.



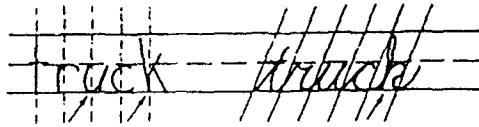
d. Line quality

There should be consistent thickness and steadiness in the lines used to form letters. The teacher should mark lines that are waver or too thick or too fine. Incorrect hand or body position or cramped fingers can cause inconsistency.



e. Slant

The slant of letters should be uniform. In general, manuscript letters are perpendicular to the baseline and have a straight, up-and-down appearance. In cursive writing the paper is slanted and strokes are pulled toward the body. Straight lines or lines with uniform slant may be drawn through the letters to indicate which letters are off slant.



f. Rate

The teacher asks the student to write as well and as fast as possible. The teacher then calculates the rate (letters per minute, *lpm*) by dividing the total number of letters written by the minutes allowed.

The following is a description of handwriting objectives by suggested grade level as seen in table 4.

Table 4. Handwriting Objectives by Suggested Grade Level (Mercer, 1983)

Grade Level	Objectives
Kindergarten	<ul style="list-style-type: none"> To begin to establish a preference for either left- or right-handedness To voluntarily draw, paint, and scribble To develop small muscle control through the use of materials such as finger paints, clay, weaving fibers, and puzzles To use tools of writing in making letters, writing names, or attempting to write words To understand and to apply writing readiness vocabulary given orally, such as left/right, top/bottom, beginning/end, large/small, circle, space, around, across, curve, top line, dotted line, and bottom line To begin to establish correct writing position of body, arms, hand, paper, and pencil To draw familiar objects using the basic strokes of manuscript writing To recognize and to legibly write own name in manuscript letters using capital and lowercase letters appropriately To use writing paper that is standard for manuscript writing
1	<ul style="list-style-type: none"> To begin manuscript writing using both lowercase and capital letters introduced to correlate with the child's reading program To write with correct posture, pencil grip, and paper position; works from left to right; and forms letters in the correct direction To copy word neatly from near position To write with firm strokes and to demonstrate good spacing between letters, words, and sentences To write manuscript letters independently and with firm strokes To write clear, legible manuscript letters at a rate appropriate for ability To arrange work neatly and pleasingly on a page (i.e., uses margins and paragraph indentions and makes clean erasures)
2	<ul style="list-style-type: none"> To evaluate writing uses a plastic overlay and to identify strengths and weaknesses To write all letters of the alphabet in manuscript from memory To recognize the difference in using manuscript and cursive writing To read simple sentences written in cursive writing on the chalkboard To demonstrate physical coordination to proceed to simple cursive writing
3	<ul style="list-style-type: none"> To demonstrate ability to decode cursive writing by reading paragraphs of cursive writing both from the chalkboard and from paper To identify cursive lowercase and capital letters by matching cursive letters to manuscript letters To begin cursive writing with lowercase letters and to progress to capital letters as needed To use writing paper that is standard for cursive writing To write all letters of the cursive alphabet using proper techniques in making each letter To recognize the proper joining of letters to form words To write from memory all letters of the alphabet in cursive form
4	<ul style="list-style-type: none"> To slant and to join the letters in a word and controls spacing between letters To use cursive writing for day-to-day use To begin to write with a pen if pencil writing is smooth, fluent, and neat To maintain and use manuscript writing for special needs, such as preparing charts, maps, and labels To write clear, legible cursive letters at a rate appropriate for ability
5	<ul style="list-style-type: none"> To reduce size of writing to "adult" proportions of letters (i.e., one-quarter space for minimum letters, one-half space for intermediate letters, and three-quarters space for tall lowercase and capital letters)

	To take pride in presenting neat work
6	To customarily present neat work To evaluate own progress in the basic handwriting skills pertaining to size, slant, shape, spacing, and alignment

Handwriting difficulties, however, are not only experienced by students with ADHD, but also experienced by students with learning disabilities. Common specific learning disorders (handwriting difficulties) of learning disabilities students are presented in table 4. Table 4 is a diagnostic chart for manuscript and cursive writing errors, likely causes and remediation procedures.

The finding of Nanik's research revealed that the general problems of students with ADHD were similar to those of learning disabilities students. Particularly, the problems encountered by the participants are italicized in table 5.

Table 4. Diagnostic Chart for Manuscript and Cursive Writing (Mercer, 1983)

Factor	Problem	Possible Cause	Remediation
Manuscript Writing			
Shape	Letters slanted	Paper slanted	To place paper straight and to pull straight line strokes toward center of body.
	<i>Varies from standard</i>	Improper mental image of letter	To have pupil write problem letters on chalkboard.
Size	<i>Too large</i>	Poor understanding of writing lines	To reteach size concept by pointing out the purpose of each line on writing paper.
		Exaggerated arm movement	To reduce arm movement, especially on circle and part-circle letters.
		Improper mental image of letter	To have pupil write problem letters on chalkboard.
	<i>Too small</i>	Poor understanding of writing lines	To reteach size concept by pointing out the purpose of each line of writing paper.
		Overemphasis on finger movement	To stress arm movement; check hand-pencil and arm-desk positions to be sure that arm movement is possible.
		Improper mental image of letter	To have pupil write problem letters on chalkboard.
	Not uniform	Adjusting writing hand after each letter	To stress arm movement; to move paper with nonwriting hand so writing hand can remain in proper writing position.
		Overemphasis on finger movement	To stress arm movement; check arm-desk and pencil-hand positions
Space	<i>Crowded letters in words</i>	Poor understanding of space concepts	To reteach uniform spacing between letters (finger or pencil width).
	Too much space between letters	Improper lowercase letter size and shape	To review concepts of size and shape; to provide appropriate corrections under size and shape.
Alignment	<i>Letters not sitting on baseline</i>	Improper letter formation	To evaluate work for letter shape; to stress bringing straight line strokes all the way down to baseline.
		Poor understanding of baseline concept	To review purpose of baseline on writing paper.
		Improper hand-pencil and paper-desk positions	To check positions to make sure pupil is able to reach baseline with ease.
	Letters not of consistent height	Poor understanding of size concept	To review concept of letter size in relationship to lines provided on writing paper.
Line Quality	<i>Too heavy or too light</i>	Improper writing pressure	To review hand-pencil position; to place wadded paper tissue in palm of writing

			hand to relax writing grip; demonstrate desired line quality
Cursive Writing			
Shape	Letters too oval in size	Overemphasis of arm movement and poor image of letter size and shape	To check arm-desk position; to review letter size and shape.
	<i>Letters too narrow in shape</i>	Finger writing Overemphasis on straight line stroke Poor mental image of letter shape	To check positions to allow for arm movement. To make sure straight line stroke - not to come all the way down to baseline in letters like l, b, and t. To use transparent overseer for pupil's personal evaluation of shape. To review letters in terms of the basic strokes in all problems of letter shape
Size	<i>Letters too large</i>	Exaggerated arm movement Poor mental image of letter size	To check arm-desk position for over-movement of forearm. To review base-and top-line concepts in relation to ¼ space, ½ space, and ¾ space; use transparent overseer for pupil's personal evaluation of letter size.
	<i>Letters too small or letters not uniform</i>	Finger movement Poor mental image of letter size	To check arm-desk and pencil-hand positions; to stress arm movement. To review concept of letter size (¼ space, ½ space, and ¾ space) in relation to base and top lines; to use transparent overseer for pupil's personal evaluation of letter size.
Space	<i>Letters in words crowded or spacing between letters uneven</i>	Finger movement Poor understanding of joining strokes	To check arm-desk, pencil-hand positions; to stress arm movement. To review how letters are joined; to show ending stroke of one letter to be beginning stroke of following letter; to practice writing letters in groups of five.
	Too much space provided between letters in words	Exaggerated arm movement Poor understanding of joining strokes	To check arm-desk position for over-movement of forearm To review joining strokes; to practice writing groups of letters by rhythmic count.
	<i>Uneven space between words</i>	Poor understanding of between -word spacing	To review concept of spacing between words; to show beginning stroke in second word starting under ending stroke of preceding word.
Alignment	<i>Poor letter alignment along baseline</i>	Incorrect writing position; finger movement; exaggerated arm movement Poor understanding of baseline concept Incorrect use of joining strokes	To check all writing positions; to stress even, rhythmic writing movement. To use repetitive exercise with emphasis on relationship of baseline to written word. To review joining strokes.
	<i>Uneven alignment of letters in words relative to size</i>	Poor understanding of size concept	To show size relationships between lower- and uppercase, and ¼ space, ½ space, and ¾ space lowercase letters; use repetitive exercise with emphasis on uniform height of smaller letters.
Speed and	Writing becomes	Degree of hand-writing	To improve writing positions; to develop

Ease	illegible under stress and speed (grades 4, 5, and 6)	skill is insufficient to meet speed requirements	more 'arm movement and less finger movement.
	<i>Writing becomes illegible when writing activity is too long</i>	Handwriting positions have not been perfected to allow handwriting ease	To improve all writing positions, especially hand-pencil position; to stress arm movement.
Slant	Back slant	Left-handedness	To correct hand-pencil and paper-desk positions.
	Vertical	Poor positioning	To correct hand-pencil and paper desk positions.
	Too far right	Overemphasis on finger movement	To make sure pupil pulls slant strokes toward center of body if he is right-handed and to left elbow if he is left-handed. To use slant line instruction sheets as aid to teaching slant. To use transparent overseer for pupil's personal evaluation. To review all lowercase letters that derive their shape from the slant line. To write lowercase alphabet on chalkboard; to retrace all slant strokes in colored chalk.

3. STRATEGIES FOR IMPROVING FINE - MOTOR SKILLS , SPELLING , HAND-WRITING , WRITTEN ORGANIZATION , AND LEGIBILITY

3.1. Fine motor skills

According to Reiff (2003), the small muscle movements required in writing are often weak in children with ADHD (and / or learning disabilities). Of course, with fine-motor difficulties, handwriting is directly affected.

3.1.1. Symptoms of fine-motor problems

Quoting from Reiff (2003) the following are the symptoms of fine-motor problems :

- a. Difficulty holding and positioning fingers on a pencil or writing tool.
- b. Numerous erasures often leading to ripped or crumpled paper.
- c. Slow speed in writing and copying.
- d. Wrist is held in a strange, awkward position.
- e. Lots of pressure is exerted when writing (pencil lead breaks frequently).
- f. Easily fatigue when doing paper-and-pencil tasks.
- g. Poor spacing on lines and page.
- h. Inconsistency in letter size, shape, and formation.
- i. Difficulty maintaining correct posture when writing.
- j. Grip release is not controlled (for example, too quick).
- k. Difficulty in fine-motor tasks such as stringing beads, buttoning, pulling up and down a zipper, trying shoelaces, putting paper clips on paper, picking up small objects with fingers, and cutting with scissors.
- l. Unable form letters automatically; think about them or looks at model.
- m. Unable control writing tool well with just slight finger movements; moves arm muscles as well.

3.1.2. Activities and tips for building fine-motor skills

The activities and tips for building fine-motor skills are as follow Reiff (2003) :

- a. Do finger warm-up exercises (open / shut, snapping, touch each one at a time to the thumb quickly) and finger - play activities.
- b. Roll out and form clay or play dough into snakes and other shapes.
- c. Squeeze a stress or squishy ball to build strength in the hand muscles.
- d. Do activities requiring placement of paper clips, clothespins, or clamps on objects.
- e. Build things with small Lego pieces.
- f. Build with various types of blocks and linking manipulatives.
- g. Use jigsaw puzzles.
- h. Do stringing, lacing, and threading activities (such as necklaces from stringing beads).
- i. Use sewing cards.
- j. Learn how to knit or crochet.
- k. Practice buttoning and opening / closing snaps on clothing.
- l. Sort small objects (buttons, dried cereal, shells) into an egg container or ice cube tray by category.
- m. Pick up small objects with tweezers and tongs.

3.2. Spelling

Quoting from Reiff (2003) the following are strategies motivate students to practice spelling words in a variety of multisensory formats :

- a. Write words in the air while sounding them out (sky writing).
- b. Write words in a sandbox with a stick.
- c. Finger-paint words using shaving cream on tabletops; or pudding, whipped cream, or frosting on paper plates.
- d. Spell words standing up for consonant letters and sitting down for vowels
- e. Pair movement while spelling words aloud (clap to each letter, bounce ball, yo-yo, jump rope, trampoline).
- f. Write the words by syllables in different colored markers.
- g. Write syllable by syllable, color-coding each one; for example, vowels in red.
- h. Color consonants in one color and vowels in another.
- i. Say spelling words into a tape recorder. Spell them correctly into the recorder, and listen to the recording.

3.3. Handwriting, written organization, and legibility

According to Reiff (2003), one of the reasons of why children struggle in writing is that they do not automatically recall the muscle movements and motor-planning skills involved in forming strokes (curves, loops, counterclockwise motion) and sequencing the step involved to form each letter. They also may not have formed a clear mental picture of how each letter looks to reproduce from memory, and are constantly seeking a visual model.

3.3.1. Strategies and tips for teaching handwriting and improving legibility of written work

According to Reiff (2003), the strategies and tips for teaching handwriting and improving legibility of written work are :

- a. Teach appropriate grasp of a pencil (pencil grip) in the early grades. If the student struggles to hold and manipulate a pencil, there are variety of pencil grips that can be used to make it easier (triangular plastic, molded clay, and soft foam cushion that pencil slides through).
- b. Provide students sufficient time to write in order to avoid time pressures.
- c. Set realistic, mutually agreed-upon expectations for neatness.
- d. Teach placing of index finger between words (finger spacing) to help students who run their words together without spacing.
- e. Use special paper with vertical lines to help space letters and words appropriately.
- f. Try a clipboard if the student's paper is frequently sliding around.

3.3.2. Strategies that reinforce the "feel" of how to form letters correctly or tactile-kinesthetic techniques

Quoting from Reiff (2003) the are strategies that reinforce the "feel" of how to form letters correctly or tactile-kinesthetic techniques are :

- a. Practice correct letter formation by tracing letters written on a variety of textures (puff paint, sandpaper)
- b. Trace letters in sand or salt trays, on the carpet, or other texture using two fingers.
- c. Write letters in the air with large muscle movements while giving a verbal prompt. Holding the student's wrist, write in large strokes in the air while talking through the strokes. For example, with the letter B, give the following instruction :
- d. Start at the top.
- e. Straight line down.
- f. Back to the top.
- g. Sideways smile.
- h. Then repeat without guiding the student's hand, but observe that the formation is correct.

3.4. Additional handwriting tips for teachers and parents

As mentioned by Reiff (2003), the additional handwriting tips for teachers and parents are as follow :

- a. Encourage appropriate sitting, posture, and anchoring of paper when writing
- b. Display and provide individual copies of handwriting checklists for students to self-monitor their own written work for legibility. The following are possible questions that may be included on a student handwriting checklist (depending on age / developmental level and grade-level standards) :
- c. Are my letters resting on the line?
- d. Do tall letters reach the top line, and do short letters reach the middle line?
- e. Do I have space between words?
- f. Are my letters the right size (not too small, not too large)?
- g. Am I writing within the lines?
- h. Are my words in lowercase, unless there is supposed to be a capital?
- i. Am I consistent in my letters-all print or all cursive, not mixed?
- j. Is my writing neat?
- k. Have I stayed within the margins of the paper?

4. STRATEGIES FOR BY PASSING AND ACCOMMODATING WRITING DIFFICULTIES

According to Reiff (2003), there are numerous writing strategies which are recommended for children and teens with writing disabilities.

- a. Substitute nonwritten projects such as oral reports for written assignments.
- b. Follow written exams with oral exams and average the grades for those students (3 - 8).
- c. Allow students to use a tape recorder instead of writing for summarizing learning, responding to questions, planning, and recording ideas.
- d. Teach proper keyboarding / typing skills and provide many practice opportunities to increase skills.
- e. Reduce the need to copy from the board or book.
- f. Provide access to the computer for written work.
- g. Provide extended time for testing, particularly written assessments (such as essay questions).

FREE PAPER 2

Cognitive Behavioral Therapy Approach for Epilepsy with Depression

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Introduction

Epilepsy is a crucial health problem. It is predicted that there are 50 millions epilepsy sufferer throughout the world. 80% of them live in developed country (WHO, 2001). Every year, there are 3,5 millions new cases with the following proportion: 40% is children, 40% is adult, and 20% is geriatric. WHO (2001) reported that epilepsy prevalence is 8,2 people within 1000 population, with the incidence 50 per 100.000 population.

Depression is the most common mental disorder of people with epilepsy. Depression in people with epilepsy often remains undiagnosed and undertreated, even though depression is a chronic illness that influences the life quality of epilepsy sufferer. (Martinovic et. al., 2006).

Depression prevalence estimation of the epilepsy sufferer vary between 11% - 62% (Berry et. al., 2000), while according to Jackson et. al. (2005), the prevalence ranged between 50%-55%. Another scholars mentioned the symptom of depression of the epilepsy sufferer ranged between 40%-60% (Jones et. al., 2005). Baki et. al. (2004) reported that depression prevalence on teen epilepsy sufferer ranging in the range 34% - 78%. Martinovic et. al. (2006) found that depression risk of epilepsy is approximately 30 patient with average age 17,4%. Based on study Nilsson et. al. (2002) study, suicide considered to be important contributor to increased mortality of persons with epilepsy.

Since antidepressants have proconvulsive properties physicians frequently have doubts about treatment with these agents. An increased seizure rate has been described in patients without a history of epilepsy with virtually all antidepressants; the seizure incidence is 0.1% to 0.5% (Prueter et. al., 2005).

It is reported that most of antidepressant increases convulsion incidence beside pharmacokinetic interaction between antidepressant and antiepilepsy has toxic side effect. It is because antidepressant is potent inhibitor to cytochrome P-450 enzyme system.

This fact is interesting for in one side depression prevalence is relatively high and in another one the usage of antidepressant is risky in increasing convulsion incidence and toxic effect. Untreated depression can influence the quality of life of sufferer and the suicide risk. Based on the fact above, it needs psychotherapy approach toward epilepsy sufferer with depression so that antidepressant dosage can be reduced as minimum as possible. CBT is one of the alternative.

A Review on epilepsy people with depression

Depression occurs more often in people with epilepsy than in the general population. Depression influences quality of life significantly (Johnson, et. al., 2003). Depression can increase convulsion effect through sleep disorder mechanism. Lack of sleeping time and unregular sleeping pattern can stimulate the occurrence of seizure. It is predicted that lack of sleeping hour can stimulate seizure (Harsono, 2001). Failure in depression treatment adequately can cause suicide. Depression also can deteriorate epilepsy medication (Jackson et. al., 2005; Prueter et. al., 2005).

Depression in epilepsy might be overlapped with seizure, but commonly it occurs in interictal moment (Barry, et. al., 2000). It is also noted, recognition symptom of anhedonia, less eating desire, lack of energy, sleeping disorder, interictal depression or disforia are associated with agitation and psychotic symptom or impulsive symptom that tends to misfortune his/her self. Those might be occurred to depression sufferer without epilepsy (Jackson, et. al., 2005).

Depression pathogenesis is connected to neurotransmitter monoamine and HPA axis. HPA axis is important factor in adapting to stress, both internal and external. Epilepsy sufferer is susceptible to stress, both related to the illness itself and psychosocial stressor. This influences HPA axis activity.

Hippocampus is susceptible brain region or is sensitive to stressor. Stressor changes morphology and stresses hippocampus neurogenesis. That change is caused by the increasing of glucocorticoid liberation, brain-derived neurotrophic factor, and the change of serotonin.

Harsono (2001) explained that stress can influence brain function through several ways. Stress and anxiety can stimulate hyperventilation. To particular patient, hyperventilation is a factor causing seizure. Epilepsy sufferers can forget to because of stress, meanwhile stress can change hormone constellation, such as the increasing of cortisol level. This increases influences on seizure threshold.