ADHD Treatment Options

THE GOOD, THE BAD, AND THE UGLY.

ADHD is a chronic condition.

There is no “cure” for ADHD.

Symptoms may become more manageable with maturity, but a significant number of adults continue to show signs of ADHD.

Fortunately, there are interventions that have been shown to be helpful in diminishing the symptoms of ADHD, and the resulting impairments.

Unfortunately, there are problems associated with virtually all of the interventions.

This is not an easy condition to deal with!

What modalities are available for the treatment/management of ADHD?

Although it is rarely attained, the is relatively good agreement about what makes up optimal ADHD management.

- Evidence-based parent training
- Educational supports including classroom behaviour management strategies
- +/- “talking” therapy for individual (likely cognitive behavioural therapy or social skills training)
- +/- medication (generally indicated in school aged children with moderate/severe symptoms)

Parent training

There are a number of fairly well established parenting programs with some research evidence suggesting effectiveness (e.g. Triple P Parenting, the Incredible Years, several others)

Triple P is available through Public Health or Early Years centres in a number of communities.

Aside from a program run for clients of the Children's Treatment Center of Chatham Kent (Triple P Parenting) , no other publicly funded group programs are currently available in this area (although Chatham Kent Children's Services does provide assistance in this area).

School Interventions

Both major local school boards are quite active in providing behavioural supports to these children, although there does seem to be some variability from school to school.

Contrary to popular belief, an official “diagnosis” is not required in order to access supports.

As in most areas, school resources are spread much more thinly than might be ideal.

“Talking” therapy

Numerous psychologically based therapies have been used with ADHD patients.

Most common are Cognitive Behavioural Therapy (CBT) and Social Skills training.

CBT practitioners in this area are a rare commodity.

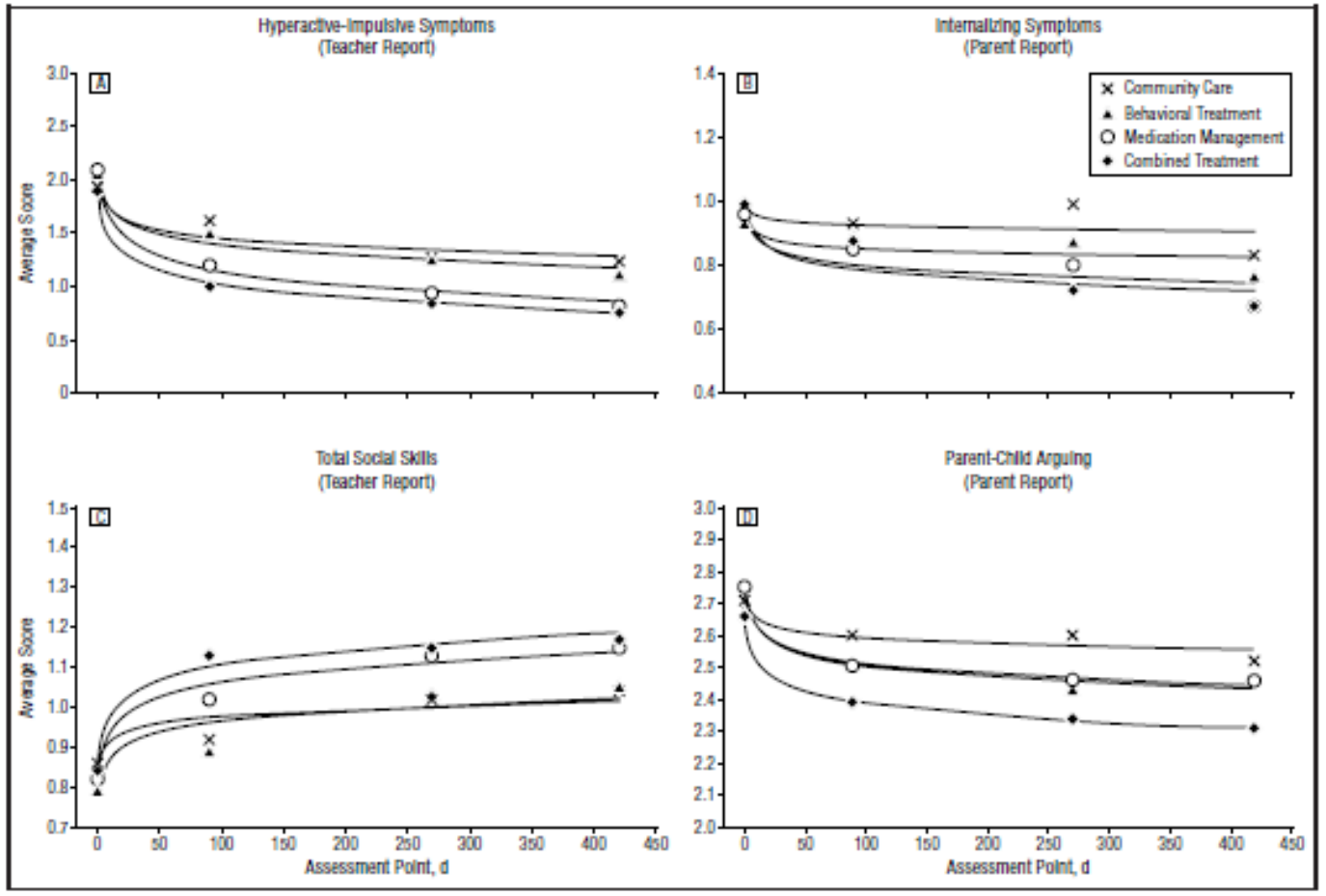
The effect size of these interventions tends to be disappointing.

The MTA trial

Fairly large trial conducted in late 1990's

Compared outcomes with medication alone, behaviour therapy alone, combined therapy, and no specific treatment.

MTA results


Hyperactive-Impulsive Symptoms
(Teacher Report)
Internalizing Symptoms
(Parent Report)
Total Social Skills
(Teacher Report)
Parent-Child Arguing
(Parent Report)
A
B
C
D
Community Care
Behavioral Treatment
Medication Management
Combined Treatment
Average Score
Assessment Point, d

The unfortunate truth….

Although non-medical therapy is clearly helpful, even the most intensive interventions have a smaller effect on the core symptoms of ADHD than does medication. This is particularly true if one focuses on the school setting.

Stimulants: the devil we know.

Stimulants are generally considered to be the drug of choice for the management of ADHD. This is particularly true in school aged children.

It is impossible to do a trial looking at whether they are effective. There are over 100 trials showing efficacy in children with ADHD.

This is not to say that they are effective in all individuals.

Unfortunately, side effects are very significant.

A quick summary of stimulants

Although there are quite a few different stimulants on the market (especially in the United States), they can be simplified into two families that can be formulated in both long and short acting forms.

All stimulants currently used for ADHD are either in the methylphenidate family (Ritalin, Concerta, Biphentin) or in the amphetamine family (Dexedrine, Adderall, Vyvanse).

There is no compelling reason to choose one family over the other. Some individuals respond better to one family, some to the other. It is impossible to predict who will respond best to any particular medication.

Stimulants (cont’d)

Stimulants are all very quick in their onset. There is no need for them to "build up" in your system.

Every day is a day unto itself. There is very little residual effect after the medication wears out each day.

Short-acting medications (Ritalin and Dexedrine) last three or four hours.

Long-acting medications (Concerta, Biphentin, Adderall, Vyvanse) last 8 to 12 hours.

Stimulants (cont'd)

Although most studies fail to show a significant difference between long and short acting medications when looking at standardized assessments, patient satisfaction as well as convenience favours the long-acting form.

Long-acting forms are considerably more expensive than the short-acting forms.

Ontario drug benefit guidelines insist that a short-acting stimulant be used initially. It is then permissible to transition to a long-acting form without any further documentation.

Most third-party drug plans cover long-acting stimulants from the outset.

Practical points with stimulants.

Short acting stimulants can be crushed, although I am told that they don't taste particularly good.

Concerta cannot be crushed or opened. It must be swallowed whole.

Adderall and Biphentin capsules can be opened, and the beads inside put in yogurt or apple sauce.

Vyvanse can be opened and the powder dissolved in water.

Vyvanse is gradually activated as it is metabolized in your body. This make it more difficult to abuse than the other drugs.

Stimulants (cont’d)

Even when the diagnosis is clear, stimulants are not helpful for all individuals.

When a single stimulant is chosen, there is an initial benefit in symptoms with 70 to 80% of patients.

If several stimulants are used sequentially, about 85% of patients will benefit from at least one stimulant.

Despite our best efforts, 10 or 15% of patients do not appear to benefit from stimulants. The reason for this is unclear.

Stimulants (cont’d)

Unfortunately, virtually everyone on stimulants has side effects.

The "big three" side effects are:

1. Appetite suppression
2. Sleep disruption
3. Irritability

Although less common, the fourth issue that is frequently on parent’s mind is the “zombie effect”.

Devil (cont'd)

Anxiety:

- Anxiety plus stimulants can be a difficult combination.

Tic disorders:

- Although not always the case, stimulants can exacerbate a tic disorder

Growth:

- Stimulants do appear to have a small but measurable effect on growth velocity

Cardiovascular:

- ????

How to proceed?

1. Do we have the correct diagnosis?
2. Is there significant impairment?
3. Is the family willing to consider medication?

If “yes” to all of the above, consider a time limited trial of medication including standardized assessments (checklists) of symptoms and side effects.

After the trial, consider how much the patient benefited (if at all), and what side effects there were (and there almost certainly will be some).

All things considered, was this a good thing or a bad thing for the patient?

How to proceed (cont’d)

If the trial went extremely well, it is reasonable to carry on.

If side effects were problematic or if effectiveness was less than ideal:

- Consider using an agent from the other stimulant family
- Consider further dosage adjustments
- Always re-consider whether the initial diagnosis was correct.

How to proceed (cont’d)

If stimulants are either ineffective or not tolerated, consider whether further trials of medication are in the patient's best interest.

It significant impairment exists, it may be reasonable to consider trials of non-stimulant medications.

This will be the topic of the next lecture.