Herbal Therapy: Children With Adhd (Attention Deficit Hyperactivity Disorder) And Depression

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Citation

Abstract
Attention deficit hyperactivity disorder (ADHD) is a neurobiological disorder of self-control. It consists of problems with attention span, impulse control, and activity level. Depression is one of the mental, emotional, and behavior disorders that can appear during childhood and adolescence. Herbal medicines used for ADHD and depression are Brahmi, Ashwaganda, Ginkgo biloba, and St. John's wart. Questionnaire survey is conducted among 100 doctors (60 children's psychiatrists and 40 pediatricians) from mental health centers and hospitals in Karnataka, 50 pharmacists and 100 caregivers of children (70 Parents and 30 primary caregivers) to analyze whether herbal medicines were given to children receiving care for ADHD and depression. The main outcome measure was doctors and pharmacist view and caregivers self-report of the use of herbal therapy in their children. It was found from survey report that lifetime prevalence of herbal therapy in patients was 20% (20 patients). Eighteen patients (15%) had taken herbal medicines during the past year. Recommendations from a friend or relative resulted in the administration of herbal medicines by 61% of 23 caregivers. Gereforte and Mentat from Himalaya drugs are commonly used for ADHD and depression. Almost 83% of caregivers gave herbal medicines alone, whereas 13% gave herbal medicines with prescription drugs. Most caregivers (78%) supervised the administration of herbal therapy in their children; the children's psychiatrists (70%), pediatricians (56%), or pharmacists (74%) typically were not aware of the use. Most caregivers supervised herbal therapy in their children, without communication with a health professional. A need exists for better communication between health professionals and parents or caregivers regarding the use of herbal therapy.

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INTRODUCTION
Attention deficit hyperactivity disorder (ADHD) is a neurobiological disorder of self-control. It consists of problems with attention span, impulse control, and activity level. Some of the factors responsible for ADHD in children include drug use during pregnancy, genetics, refined sugar or food additives, brain injury and toxins. Behaviors associated with ADHD include troubles finishing daily tasks, Listening problems, Distracted easily, Difficulties finishing school work, Needing much supervision, Difficulty waiting in line for group activities, Excessively running and Climbing. Difficulty sitting and staying seated.

Depression is a serious disorder that can cause significant problems in mood, thinking, and behavior at home, in school, and with peers. Depressive disorders come in different forms, just as is the case with other illnesses such as heart disease. This pamphlet briefly describes three of the most common types of depressive disorders. However, within these types there are variations in the number of symptoms, their severity, and persistence.

Major depression is manifested by a combination of symptoms (see symptom list) that interfere with the ability to work, study, sleep, eat, and enjoy once pleasurable activities. Such a disabling episode of depression may occur only once but more commonly occurs several times in a lifetime.

A less severe type of depression, dysthymia, involves long-term, chronic symptoms that do not disable, but keep one from functioning well or from feeling good. Many people with dysthymia also experience major depressive episodes at some time in their lives.

Another type of depression is bipolar disorder, also called manic-depressive illness. Not nearly as prevalent as other forms of depressive disorders, bipolar disorder is characterized by cycling mood changes: severe highs
(mania) and lows (depression). Sometimes the mood switches are dramatic and rapid, but most often they are gradual. When in the depressed cycle, an individual can have any or all of the symptoms of a depressive disorder 20.

The risk factors include Family history, Stress, a loss of a parent or loved one, Abuse or neglect and other trauma, including natural disasters, Depressive symptoms include: irritability, depressed mood, persistent sadness, frequent crying, thoughts of death or suicide, loss of enjoyment in favorite activities, frequent complaints of physical illnesses such as headaches or stomach aches, low energy level, fatigue, poor concentration, complaints of boredom, major change in eating or sleeping patterns, such as oversleeping or overeating. Treatment for depression can be done by - Electroconvulsive therapy (ECT), Conventional antidepressant medications, Herbal Therapy and Psychotherapy 20.

Herbal medicine is referred to the use of plant products to treat or prevent a disease. It is also known as botanical medicine, herbalism, herbolgy, phytotherapy or Phytotechnology 17. An herb is a plant or plant part valued for medicinal, savory, or aromatic qualities. Others consider herbs to be botanicals and therefore define them as a substance derived from plants, a vegetable drug, especially in its crude state. When added to foods as supplements, herbs have been also termed as "nutraceuticals" 18. Herbal medicine is also known as a subset of the larger term "complementary and alternative medicine" (CAM) 19. Long before the advent of modern medicine, herbs were the mainstream remedies for nearly all ailments. Knowledge of herbal medicines was common and use of herbal medicines was widely practiced. People commonly diagnosed their own illnesses, prepared and prescribed their own herbal medicine, or bought them from the local apothecaries 12. However, over the last few decades, people have been turning in increasing numbers to the use of herbal medicine as both an alternative and adjunct to modern drugs. The growth of this segment of society has been greatly accelerated within the last ten years 13. Research results from 9, 10, 11, 12, and 13 have shown that, ADHD and depression in children, adolescents and adults can be treated using various herbal drugs. Herbal medicines used for ADHD and depression are different preparations of Brahmi(Bacopa monniera) Ashwaganda, Ginkgo biloba, ginseng, chamomile, Bacopa moninera, St. John's wart(Hypericum perforatum) and Valeriana officinalis 4, 5, 6, 7, 8, 9.

**OBJECTIVES**

- To determine and analyze the doctor's and pharmacist's opinions, views and experiences about use of herbal drugs in the treatment of ADHD and depression in children
- To determine and analyze self report of parents or
caregivers of children with ADHD and depression, regarding their preference, views and experiences while treating with herbal drugs.

**METHODOLOGY**

Questionnaire survey is conducted among 100 doctors (60 children’s psychiatrists and 40 pediatricians from mental health centers and hospitals in Karnataka, India), 50 retail Pharmacists (in different parts of Karnataka) and 100 caregivers of children (70 Parents and 30 primary caregivers) to collect and analyze data regarding treatment of ADHD and depression in children with herbal drugs.

Questionnaire developed was a 15-item self-report questionnaire that inquired about herbal medicines taken by the patients (Children) to treat symptoms of ADHD and depressive disorders. The questions were based primarily on published reports and were modified to specifically address the patterns of herbal therapy in children with psychiatric disorders versus herbal therapy in the general adult population.

The questionnaire focused specifically on caregivers’ administration of herbal medicines in their children. If applicable, participants indicated current use of herbal therapy and specific herbal medicines administered the frequency of administration and/or discontinuation, the mental disorder or other conditions attempted to treat, reason for use and/or discontinuation, and their sources of information. Other items addressed were whether alternative therapy practitioners were visited, communication of the use of herbal therapy with physicians or other health care providers, whether the herbal therapy was supervised, whether herbal medicines were administered in conjunction with or in place of conventional drugs, and perceived benefits of herbal therapy. The 23-item questionnaire comprised mostly multiple-choice questions and 3 open-ended questions.

**RESULTS AND DISCUSSIONS**

A. Views and opinions of children's psychiatrists and pediatricians.

1. Over All Opinion Of Doctors Regarding Herbal Therpay.
Among total of 152 doctor surveyed, 41%( 62 doctors) of them said Herbal therapy is useful. But 35% (53 doctors) were not aware of herbal therapy.

2. It was found from survey report that 33% of the Doctors favored herbal therapy, 10% neither favored nor opposed and 57% have opposed herbal therapy.

3. Factors Influencing To Prefer Herbal Therapy

- Patient request/pressure
- In general practice
- Lack of effective conventional treatment
- Belief in safety and/or efficacy
- Attempt to improve physician-patient relationship
- Profitability
- Training in or familiarity with a herbal therapy
- The alternative therapy fit the patients cultural beliefs
- The patient failed to respond to conventional treatment
- The patient had a “non-organic” disease

4. Results Of Herbal Therapy For Adhd And Depression

Emotional and Behavioral disorders before and after therapy (Table: 1)

**Figure 4**

<table>
<thead>
<tr>
<th></th>
<th>Before treatment</th>
<th>Improvement after treatment</th>
<th>% Improvement</th>
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<td></td>
<td>Score</td>
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<td>Marked</td>
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<tr>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Fear</td>
<td>12</td>
<td>2</td>
<td>5</td>
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<tr>
<td>Aggressiveness</td>
<td>29</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
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</tr>
<tr>
<td>Temperature</td>
<td>15</td>
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</tbody>
</table>

5. Communication With Health Care Professionals In 20% Patients Taking herbal Medicines

**Figure 5**

6. Problems Or Patient Complaints

**Figure 6**

B. Views and opinions of pharmacists

**Figure 7**

C. Self report of parents and care givers.

1. Patient profile

**Figure 8**

2. Herbal Preparations Given To The Patients With ADHD Or Depression By Caregivers Of Children
CONCLUSIONS

DOCTORS

Misconception regarding safety: Many people have the mistaken notion that, being natural, all herbs and foods are safe. This is not so. Very often, herbs and foods may interact with medications you normally take that result in serious side reactions.

Communication with health practitioner: It is always a good practice to tell your doctor or health practitioners what you are taking so that they can advise you of possible complications, if there is any. You should also keep an eye for unusual symptoms. Very often, this may foretell the symptoms of a drug interaction.

PHARMACISTS

Most of the pharmacists concluded that psychiatrists and pediatricians should not endorse treatments that are unsupported by sound research, nor remain ignorant about alternative approaches to mental illness.

The extent of use of herbal treatments for mental illness suggests that psychiatrists and pediatricians should become more knowledgeable about developments in this area.

CAREGIVERS AND PARENTS

Some of the caregivers reported giving a wide spectrum of various herbal products to their children.

Most of them concluded that parental knowledge and communication about these products with their child's health care provider is lacking. Certain therapies are known to have potential adverse effects alone or in combination with prescription and over-the-counter medications. Therefore, it is important for health care providers to have knowledge about herbal products, to inquire about their use, and to educate families about the risks and benefits these products may have.

SUGGESTIONS

Most of the doctors, parents/caregivers of children and pharmacists suggested that to improve herbal therapy for treatment of ADHD and depression in children the following advises should be given improve Doctor-Caregivers of children and pharmacist relation ship

- All patients should be asked about use of herbal therapies and dietary supplements. Use of these agents should be documented in the medical record.
- “Natural” does not necessarily mean safe.
- Herbal-pharmaceutical interactions do occur; therefore, avoid combined use.
- Lack of standardization of herbal agents may result in variability in herbal content and efficacy among manufacturers.
- Lack of quality control and regulation may result in contamination during manufacture and potential misidentification of plant species.
- Herbal treatments should not be used in larger-than-recommended dosages.
- Herbal treatments should not be used for more than several weeks, because of lack of studies proving long-term safety.
Herbal treatments with known adverse effects and toxic effects should be avoided.

Infants, children, and the elderly should not use herbal treatments without professional advice.

An accurate diagnosis and discussion of proven treatment options are essential prior to the patient's considering use of herbal treatments.

Adverse effects should be documented in the patient's chart and therapy discontinued.

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