

MEDICAL MEMO

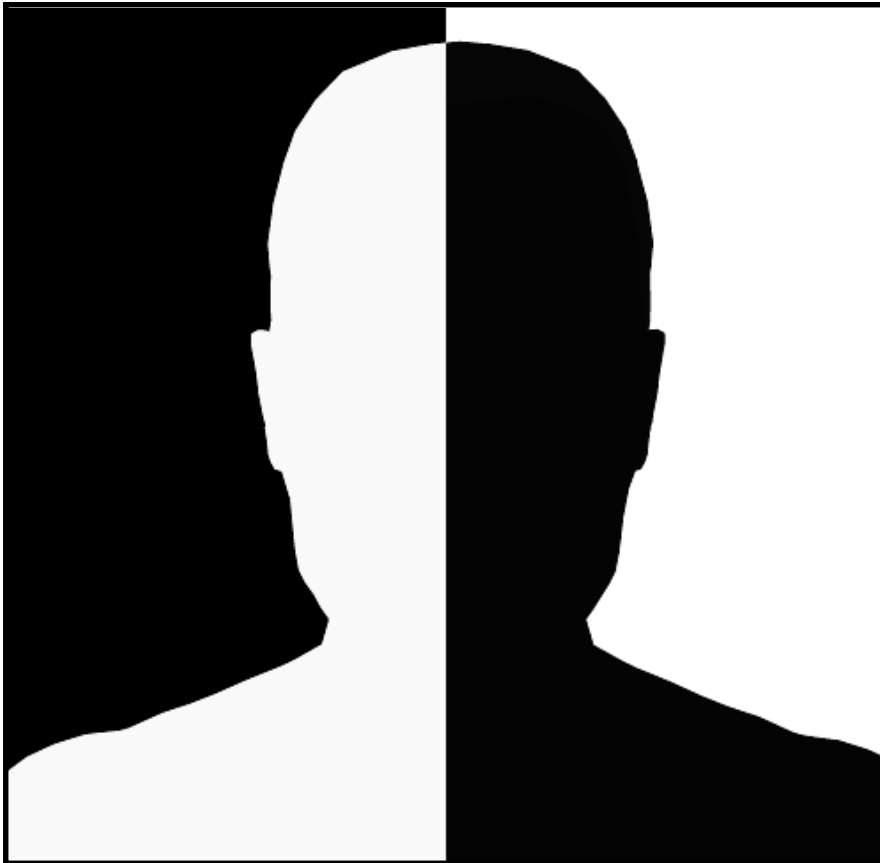
Kevin Leehey, M.D. Child, Adolescent and Adult Psychiatry; Board Certified

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www.leehey.md.com

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What Is Seasonal Affective Disorder (SAD)?



The term “**Affective**” refers to mood or feelings. Generally this refers to the various forms of depression but includes mania as well. “**Seasonal**” means that the depression or mania seems to vary with the season of the year. Most often this occurs as the beginning or return or worsening of depression in the fall and winter followed by improvement in the spring and summer. Some people with Bipolar Disorder (also known as Manic Depression) will tend toward depression in the winter and mania in the summer. (See the summer ‘99 Medical Memo for more about Bipolar Disorder). Some people have a yearly or almost

yearly pattern where a worsening or onset of symptoms at a certain time is quite predictable. By the way, this is different from or may overlap with a tendency to hard emotional times at certain sad anniversaries, return to school, other stressors, loss of or change in life structure, or “holiday blues”. SAD is believed to be a biologically, not life event, based disorder and pattern.

In fact, the most frequently cited biological mechanism causing the cycles or pattern of SAD is exposure to amount (time) and intensity (brightness) of daylight ! Why or how this occurs is not fully understood but clearly melatonin

and the Pineal gland have a role. The straight forward and simple point is that we all need (some of us far more than others) an adequate amount of sunlight exposure all year round or we are vulnerable to moodiness or even a full blown Major Depression.

The depression form of SAD is more common in northern (or far south in the southern hemisphere) latitudes and climates that have shorter or excessively cloudy days and thereby less hours of bright sunshine. If the weather is cold or rainy so that people do not go out in the sun this also increases the risk. This helps to partially explain the phenomenon of “cabin fever “ many people experience when cooped up inside for long periods. The manic form of SAD usually occurs in summer in persons who have winter depressions. The psychological effects of various weather patterns is a bigger and fascinating topic which also includes some people being sensitive to the ionization and pressure changes of weather fronts, and even certain winds like the Santa Ana in California, the Chinook in Alaska and Yukon, and the Foehn in central Europe. The amount of windows, skylights and orientation to the sun of our buildings also is quite important in determining the amount and intensity of sunlight .

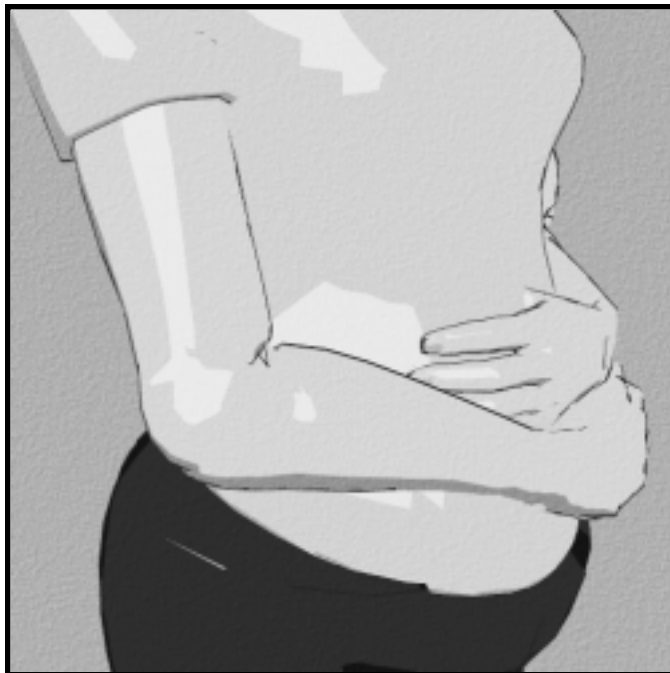
Many people are surprised to learn that SAD occurs in places as sunny and clear in the fall and winter as Arizona. The incidence of SAD is much less here but not rare. Even we have less sun, cooler weather, and shorter days in the winter, such that many people have less opportunity to get outside in bright sunshine each day.

Continued on page 3

The Importance Of A Healthy Pregnancy

Various studies the last 30 years have emphasized the many ways in which having a healthy pregnancy, birth, and first few weeks after birth is so crucial to a baby's future. This article focuses on the beginning of life - conception to 3 months after birth; and especially the mental health effects of ensuring this time period is a healthy one.

We know that when the pregnant mother has certain infections like Toxoplasmosis, Rubella, Cytomegalovi-



rus, Herpes type II, Syphilis, or HIV during pregnancy or at birth disastrous effects on the newborn are not unusual. Did you know that the world wide influenza epidemic of 1917-18 was associated with a substantial increase in later schizophrenia and parkinsonism rates in children born of mothers infected while pregnant? Other infections may have as yet unknown effects.

Nutritional deficiencies such as anemia or less obvious deficits can impair the baby's early and future health. Recent studies have shown that moder-

ate doses of extra folic acid taken before and while pregnant substantially reduces the risk of Spina Bifida and other "Neural Tube" birth defects. We also know that children born of poorly nourished mothers have a higher risk of disruptive or illegal behaviors as well as health problems as they grow up.

For over 30 years we have known that smoking causes babies to be smaller than expected at birth. This leads to a higher rate of several health prob-

lems. A recent study shows that children born of mothers who smoked while pregnant have a higher risk of delinquent, antisocial, or criminal behavior. There is also a higher risk of attention deficit hyperactivity disorder and learning disorders.

Alcohol use while pregnant remains by far the most damaging drug to the developing fetus. Although the effect

on any individual may vary, generally the more alcohol used, the longer it is used, the more damage seems to occur. Any drug of abuse, including alcohol and cigarettes, used immoderately can cause fetal alcohol or drug damage or syndrome. The problem is we have no good studies that tell us what "moderate" is in pregnancy; we don't what, if any, amount is safe.

Studies in the last 15 years have shown a direct link between perinatal (around birth) health problems in the mother and baby and later behavioral

Did You Know?

A 1999 article from the American Psychiatric Association reports a study from the Hay Group which studied trends in health care spending from 1988 to 1998. The study uses constant dollars to eliminate the misleading effects of inflation.

The total value of employer provided health care benefits decreased 14%. General (non mental health) health care benefits decreased 12% while mental health care expenditures decreased 55% !

In other words: Health insurers paid for less health care in 1998 than they did in 1988. Did your insurance premium drop as they saved money? Did your coverage improve? Where did that extra money go?

Managed Care companies have spent over 100 million dollars to fight various provisions of proposed patient protection legislation. Simultaneously, these companies report record profits and pay incredible bonuses, stock options, and salaries to their CEO's and other executives.

Furthermore, the area of spending insurers cut by far the most was mental health. **The money spent by employer sponsored health insurance for mental health care in 1998 was half what was spent in 1988!** Does that sound discriminatory to you?

problems in the youth, especially in areas like impulse control, learning, and temper control.

The most likely link between all these findings is small to severe damage to the developing central nervous system including the brain. These findings come from studies that reportedly rule out other causes such as child neglect, abuse, poor role models, or poor parenting. These factors probably interact but even so **the message is clear:** Get good prenatal care, take care of your health and nutrition, avoid illness, follow healthy habits, and make sure you have as good a support system as possible.

Technology and Your Children

In this article "Technology" refers to the full range of electronic information and computer devices and processes both currently available and coming in our children's lifetimes. This includes the obvious such as computers (hardware), the use of programs (software) such as word processing, spreadsheets, graphics, or calculating and it also includes the Internet. Technology also includes fax machines, voice mail, cell phones, beepers, laptops, e-mail, Power Point presentations, computer chips that run key systems in our cars, microwaves, ovens, VCR's, TV's, stereos, and of course various games on computers, Playstations and Nintendos.

Current jobs and jobs to come require ease with technology. Try to get a job now as a secretary, mechanic, in the military, or as a store clerk without needing to use technology; not to mention getting higher paying jobs or having a good shot at career advancement! Lifetime incomes are now not only tied to years of education but also to technology, and especially computer, skills. In fact, two equally educated and qualified

job applicants now are separated into the employed and un or under-employed by computer skills.

School success and certainly high achievement are more and earlier determined by comfort with and skill with technology. If you are not ensuring your child has this comfort and skill your child is likely at a disadvantage, no matter how otherwise talented. If two 4th or 6th graders turn in a similar quality book report, one handwritten and the other word processed, which do you think will be easier to read, more attractive, and get the higher grade, more times than not? Middle schools and high schools routinely expect Internet research for various reports and term papers. Entire classes at even Pima college are done over the Internet, already! Is there any doubt about what the future will bring? Denying this for yourself is one thing, denying it to your kids is ..., well, a whole other thing.

Maureen Andrew, a colleague at The Casey Family Program has collected some enlightening data:

- 'More than half of all new jobs require using some form of information and tech-



nology literacy.'

- 'In 1995, workers with computer skills earned 25% more than workers without

Continued on page 4

SAD (contd.)

So what do you do if you suspect you have SAD? You do what you should always do when you suspect you have an illness: go see your doctor, learn about it and other possibilities, make sure it isn't some other health problem, and see a mental health professional knowledgeable about the condition, related conditions, and **treatments**. Psychotherapies used for depression, life style adjustments and medication used in other forms of depression are also often helpful for SAD. Increasing healthy light exposure is often desirable as well for SAD. Neither the use of melatonin for SAD nor light therapy for non SAD depressions

are effective. In the next paragraph I will address light therapy and then some lifestyle modifications.

Light Therapy is an increasingly accepted and proven treatment for some or many people with SAD. Bright diffuse fluorescent light of 10,000 lux for 30 minutes daily is best for most people. The light does not seem to need to be full spectrum, thereby minimizing ultraviolet (UV) light. The light can be given in the early evening or during the day, but morning light, mimicking sunrise, is best. If living patterns cannot be adjusted to achieve this, commercially sold Light Boxes can be purchased for around \$300 to \$400. Light boxes typically come with filters to screen out ultraviolet light. Light therapy is reportedly free of significant or lasting side effects. A useful source of information is the *Society For*

Light Treatment and Biological Rhythms reachable on the Internet at www.websciences.org/sltbr.

Lifestyle adjustments include various ways to ensure appropriate levels of light exposure. This may include making choices about where you live and work, the hours you keep, and how you spend free time. Exercise outdoors in the morning such as a morning walk, hike, jog, or bike ride are obvious good choices. Getting outside in the light for at least 30 to 60 minutes regardless of the weather, keeping the blinds or curtains open in the house, choosing to be in a sunny room at home or work, and avoiding winter "hibernating" indoors or living and working in a "cave-like" existence are wise. Of course, many of these lifestyle choices will help a lot more than seasonal depressions.

Technology (contd.)

such skills.'

- '40% of American households have a personal computer. 41% of Caucasian families own a PC while only 19% of African American and Hispanic families do.' This is not a healthy trend for America. 'While education is the great equalizer, technology' could become an 'engine of inequality' if minorities continue to lag.

- '67% of college graduates use a computer at work compared to less than 10% of high school dropouts.'

- 'In 1992 a college graduate earned 83% more than a non-college graduate did.'

- '30-39% of all students report that computers are frequently unavailable at school.'

So why not get a computer with an internet connection for your children at home? There are several concerns reluctant people state:

- *The cost* - Computers are getting cheaper all the time. You can lease very cheaply, you can buy used, and since the quality improves so much so fast you can get last year's or even last month's hot model quite cheap and still get a very versatile machine with key software included. Consumer's Reports is just one of several consumer oriented magazines that runs a yearly thorough review of what's available for a reasonable price. Even more important, they help you figure out what you really need.

- *"I don't know anything about computers."* - Well, learn! This is for your kids;

now and in the future. And it may even help you and your prospects. Friends, teachers, colleagues, relatives, neighbors can help. You don't have to become an expert, you only need to know enough to know what's going on; anything else is a bonus.

- *"They'll just play games for hours."* - Not if you don't let them! Buy only educational "games". Limit game time or supervise game time. Use short periods of game time only as rewards. Make sure the kids have other constructive ways to spend time. Model for them from an early age constructive uses of free time.
- *"The Internet is full of evil influences."* - Yes, they do exist on line just as they do everywhere else. You can get software to limit where your kids surf on-line. You can supervise and limit their Internet time. You can say no to e-mail or instant-messaging and ban all chat-rooms. This concern is real and can be dealt with effectively.

Let's directly address some often unspoken principles:

- Always remember what the technology is good for, and use it, and allow it to be used for good.

- If you want your teen to spend time with the family, spend time with your child. You cannot expect to begin a relationship with your now 13 year old that you had little to do with previously.

- If you want your child to not waste hours in front of the TV then don't do it yourself; and don't use the TV or VCR

or Nintendo as a baby sitter. Yes, sitcoms and other shows on TV can be quite entertaining. But don't you want your youth to have, want, and enjoy something better to do?

- Think twice, even three times before putting a phone, TV, VCR, Nintendo, Playstation, or computer in your youth's bedroom. If you do, don't be surprised when they rarely come out. You won't be able to monitor what they're doing on the computer or Internet at all if it's not in a place open to the family.

- Make technology beyond the basics like word processing a reward and supervise it. Increase freedom step wise and when responsible usage is demonstrated. Question whether chat rooms are ever advisable and wonder about e-mail. Think twice about the value of a new technology before jumping into it - like instant messaging.

In summary, Even if you feel you don't need it, your children and grandchildren almost certainly will benefit greatly from computer and technology literacy at school, at home, and at work. And the sooner the better. Just as teaching a foreign or second language is easier earlier, computer skills come easy early. Appropriate material is plentiful for all ages. The common areas of concern can be addressed to almost every one's satisfaction.

Kevin Leehey, M.D.
1200 North El Dorado Pl.
H-800
Tucson, AZ 85715

Phone: (520) 296-4280
FAX: (520) 296-3835
www.leeheymd.com

