Medicine

What are bio-rhythms?

At the beginning of the 20 century, medical scientists made a surprising discovery: we are built not only of flesh and blood but also of time. The scientists demonstrated that we all have an internal "body clock" which regulates the rise and fall of our body energies, making us different from one day to the next. The forces which create the "highs" and "lows" in our everyday life are called biorhythms.

The idea of an internal "body clock" should not be too surprising since the lives of most living things have the 24-hour night-and-day cycle. The most obvious feature of this cycle is the way we feel tired and fall asleep at night and are active during the day. If the 24 hour rhythm is interrupted, most people experience unpleasant side effects.

As well as the daily rhythms of sleeping and waking, we also have other rhythms that last longer than one day and which influence wide areas of our lives.

Most of us would agree that we feel good on some days and not so good on others. There are days when accidents happen and you easily lose your temper. On some days you work hard and your head is full of ideas and on some other days you can't concentrate on anything.

Scientists identified three biorhythmic cycles: physical, emotional and intellectual. Each cycle lasts about 28 days and each is divided into a high energy period and a low energy period of equal length. During the high energy period we are more resistant to illness, better coordinated and more energetic; during the low energy period we are less resistant, worse coordinated and are easily tired.

The "critical" or weakest time is the time of changeover from the high energy period to the low energy period, or vice versa. This "critical" time usually lasts a day. On the critical day of a physical biorhythm there is a greater chance of accident and illness. Some car insurance companies in Japan have issued biorhythm forecasts to its clients to cut the number of accidents.

Optimists do better than pessimists

Researchers have started to study optimism, the curious human habit of expecting good things to happen, often in defiance of reality. Dozens of recent studies show that optimists do better than pessimists in work, sport, at school. They suffer less of depression, achieve more goals, respond better to stress, wage more effective battles against disease and, yes, live longer. Optimists believe in positive future, and it often comes.

The success of optimism has convinced scientists that they should focus less on misery and more on why things go right. Social science now finds itself in almost total darkness about the qualities that make life worth living. Over the past three decades there were 46,000 papers in psychology literature on depression and just 400 on joy. But the 21* century will become the time of science of human strength and personal fulfillment.

The American Psychological Association started 2000 with a special issue of journal devoted to optimism and positive psychology.

Such observations that optimists live longer than pessimists lift the spirits. One reason may be that optimists do a better job of staying out of harm's way. Pessimists are usually in bad moods and are more likely to do risky things. They are more prone to accidents, including car wrecks, violence, household troubles and even homicide.

Taylor, author of the book "Positive Illusions" said researchers know very little about how such an optimistic mood might help the body's defences. The key,she said, is that such unrealism "isn't necessarily bad. It can be wonderful".

This view has its critics. Some psychologists say that a false sense of security can be dangerous when it comes to taking risks.

They say that people can get into serious troubles if they don't understand the risk they are facing.

Depression

Nyearly 500,000 residents in the UAE are estimated to be suffering from depression, and the prevalence of the condition is expected to increase worldwide over the next decade, mental health experts said in the capital yesterday.

In order to effectively treat the condition, a relatively new method known as transcranial magnetic stimulation (TMS) therapy has therefore been introduced.

The treatment uses magnetic pulses to stimulate parts of the brain responsible for depression. Such stimulation eases depression symptoms.

'Depression is a common mental disorder worldwide. In the UAE, the rate of mental illnesses has doubled in the last decade, similar to rates of increase in developing countries," said Dr Yousuf Abu Allaban, chief executive officer and consultant psychiatrist at the American Centre for Psychiatry and Neurology (ACPN).

"We are therefore introducing TMS therapy, one of the safest modes of non-invasive treatment, at our centres in Abu Dhabi and Sharjah, and we hope it will benefit patients suffering from moderate and severe forms of depression," he added at a press conference held to launch the treatment.

The therapy is widely used in the United States since it was approved by the US Food and Drug Administration (FDA) in 2008. According to statistics cited at the conference, 600 psychiatrists use TMS therapy to effectively treat about 20,000 patients across the world. The treatment is especially prescribed in cases where antidepressant medication is not effective on its own, and in patients suffering from severe depression, Dr Adel Karrani, medical director and psychiatrist at the ACPN, told Gulf News.

"Treating depression is especially important because it is so closely correlated with chronic diseases such as diabetes and cardiovascular disease. In fact, depression can make patients more prone to chronic diseases, and chronic diseases can also make people depressed.

"Tn fact, the bulk of our patients at the ACPN, namely, 50 to 70 per cent, approach us for the treatment of depression," he said.

TMS therapy can be used for patients aged 18 to 65, and has minimal side effects when administered carefully.

"We are also working with insurance companies in order to ensure that they cover treatment for patients," Dr Karrani said.