

What induces the mind to cure our body...The #Placebo #effect

I often find my sinusitis reducing when I take a particular concoction of homeo medicines most of which are no way related to sinusitis. Is this happening because the medicine is effective on me or because I believe that the medicine will work for me...Let us find out.

The basis of this, is a study published on July 11th, 2002, in the New England Journal of Medicine by Dr J B Moseley, an orthopedic surgeon. This doctor was having doubts on the effectiveness of the use of arthroscopic surgery for a particular arthritic affliction of the knee. The doctor decided to do a study on 180 patients with Osteoarthritis from the veteran's hospital in Houston Texas.

Dr Mosely and his team divided the group of 180 people into 3 groups. The doctor followed up by doing three different procedures to each of these groups. The groups were not aware about the different treatments that they were being administered. The first group got the standard treatment which consisted of anesthesia, three incisions, insertion of scopes, cartilage removal, correction of soft tissue problems, and ten litres of saline washed through the knee.

The second group of 60 people had the following procedure done on them. Anesthesia, three incisions, scopes inserted, and ten liters of saline washed through the knee. There was no removal of cartilage that was done on this second group of people.

For the third group of people consisting of 60 people there was no real surgery done. What was done was a simulated surgery where anesthesia and incisions were done, and the time taken for the operation procedure took the same time as the other two. But no instruments were inserted into the knee nor was anything inside the knee done.

For two years following the surgery all the three groups were tested for lessening of their pain, and for the amount of time it took for them to walk and to start and become effective in climbing stairs. The first group that had the full surgery was delighted and said that they would recommend the surgery to their families and friends.

The third group of 60 people on whom there was no actual insertion and correction in the knee also has the same amount of relief from pain and improvements in pain as the first group, the group on whom the total and complete surgery was done. The major point to be noted here was that when looked from outside the surgery marks on the knee looked the same in the first group and the third group members.

Since the cost of the surgery at that time was around one billion dollars there was a huge outburst that was raised when these findings were published in the medical journal. It also led to a major embarrassment to the surgeons who were regularly doing this procedure to patients on understanding that the patients were recovering not because of their surgical skill but by what we call as the placebo effect.

Placebo comes from Latin for I shall please. The term was first used in the fourteenth century to refer to sham mourners who were hired to wail and sob for the deceased at the funerals. It first appeared in the medical dictionary relating to the marginal practices in medicine. Two widely quoted examples are as below. In 1794 an Italian physician named Gerbi discovered that when he rubbed secretions from certain worms on aching tooth the pain went away for almost a year. Gerbi kept proper records of all his patients and concluded that the same was effective for 68% of his patients. The key point here is that Gerbi believed that these secretions helped and so did the majority of his patients. It was also believed for a very long time that Egyptian mummy which was grounded to fine

powder was a remedy for epilepsy, abscesses, rashes, fractures, paralysis, migraine, ulcers and many other things. In fact, still about a century ago genuine Egyptian mummy was part of the E Merk catalogue and could be ordered.

Placebos are effective mainly because of two reasons

1. Belief

Our confidence and faith in the drug, the procedure, or the care giver. Sometimes just a fact that a doctor or nurse is paying attention to us and reassuring us not only makes us feel better but also triggers our internal healing process. Even a doctor's enthusiasm and confidence for a particular treatment or procedure may bring in faith and move us towards a positive outcome.

2. Conditioning

As told by Pavlov's after his famous discovery called Pavlov's conditioning the dogs salivate not only to when they are being fed food but also to whatever they started to associate with food. So, the footsteps of the person bringing the food induced salivation in the dogs even though the food was yet to reach them. So, familiarity or conditioning can lead to expectations which immediately releases hormones and neurotransmitters such as endorphins and opiates which start the body recovery process.

So next time you see your favorite doctor and feel better or pop a pill and feel better or if a highly specialized doctor prescribes a wonder drug and you immediately feel better it might very well be the placebo effect playing out...

To understand how the placebo effect alters other parts of our life watch this space for more...