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Study on the Regulation of Physiological Functions of Human Body Using Psychological Techniques

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Abstract

Usually, the lungs work automatically or under mind control, when a deep breath is taken. This phenomenon can be conjectured by extrapolation that some other functions of organs, glands and tissues of human body probably also have two function modes i.e. automatic and psychological regulation. Positive answers were given according to the experiments we have conducted. On this basis, we further conducted the typical cases study on the treatment of diseases including vessels tension related diseases and arteriosclerosis, using psychological techniques. The preliminary results show that several types of diseases can be treated by such methods and the effect is desirable. Because of limited conditions, our works are conducted within the scope of individual cases, therefore the conclusions cannot be firmly proved. However, that does not mean that the study of individual cases is useless, because the individual experiment is very important to obtain the reference knowledge before any large-amount experiments.

Keywords: Regulation; Physiological Functions; Psychological Techniques

1 INTRODUCTION

Health is the basis of happy life and efficient work, while diseases are the formidable enemies of health and the primary limitation of human life expectance.

A great deal of studies have been carried out on diseases, and splendid achievements have been obtained. But for the medical science, the fight against diseases, healthcare and cosmetology is still a heavy burden and long road.

It has been well known for a long time that the psychological state significantly influences the physiological functions of human body. The effects of physiological biofeedback[1,2], Qigong[3-6], Yoga[7-10], psychological hint[11,12], hypnotherapy[13-16] and meditation therapy[17-20], are to achieve the goal of disease treatment or health care by more or less utilizing the influence of psychological methods on physiological functions of human body. Valuable achievements have been obtained by these methods, including the treatment of cancers [21-25].

In 1997, Yueliang Zhou was a visiting professor in the National University of Singapore. One day when going out of the lab in the afternoon, he felt tired and breathed deeply by expanding his chest, at that time a new idea came in to his mind: the work of the lungs is usually automatic, but controlled psychologically at deep breathing, which shows that the lungs have two working modes of automatic function and psychological control.

The extrapolation method is commonly used in mathematics and physics to expand the applicable laws from the known scope to unknown, and then apply the obtained datum in experiment or other methods for verification. In case, the conclusion is verified, and the original laws can be applied in the unknown scope.

As an important organ in human body, the lungs are responsible for inhaling fresh oxygen and discharging carbon dioxide. As mentioned above, the lungs are normal automatically running. However, the function states of the lungs,

such as breathing rate and depth can also be controlled psychologically. Besides the lungs, many other functions of organs, glands and tissues of the human body are harmoniously and automatically running to make healthy. It can be conjectured by extrapolation that these functions may also have the two modes. If it is true, these functions can be controlled psychologically for disease treatment, healthcare and cosmetology. Experimental studies have been conducted to verify our assumption [26].

2 EXPERIMENTS

2.1 Experiments of Controlling Salivary Gland Secretion

At first, 10 participants were asked to ingest the saliva, except the experiment process of 15 minutes; then watched a clock. When the experiment was finished, everyone spat the saliva into a vessel. A measuring-cylinder.was used to measure the amount of the saliva. It was found that the amount of saliva varied from 0.2 to 3.0 ml, and the average amount is 1.44 ml.

Secondly, all the participants were asked to ingest the saliva, and then focusing attention on the salivary gland under the tongue, meditating the state of eating bread without any drink, and psychologically driving the salivary gland to continuously secrete saliva by repeatedly and silently saying "salivary gland secretes more saliva." When the experiment of 15 minutes was finished, everyone spat the saliva into a vessel, then measured using a measuring-cylinder, just like that mentioned above. Measurements showed that the amount of saliva ranged from 0.8 to 10.5 ml; and the average amount is 6.93 ml.

As the experimental condition control was not strict, so the data are scattered. But the results still indicate that the salivary gland secretion can be regulated by psychological methods.

2.2 Experiments of Controlling Sebaceous Gland Secretion

Three participants are involved in this experiment. Similar to the above method, every participant was asked to select a position on his face, imagining the state of lipoma caused by excessive secretion of sebaceous gland, and psychologically driving the sebaceous gland to continuously secrete grease by repeatedly and silently saying "secrete more sebum." This was practiced twice a day for 10-20 minutes each time. Five to seven days later, lipoma appeared on the face of every participant.

An elder participant having the history of dry hair disease, was also selected who was asked to focus attention on his scalp, and then visualized the state of the blood flowing smoothly in the vessel of scalp, repeatedly and silently say "work sebaceous gland, secrete more sebum." This was practiced twice a day for 15-20 minutes each time. Ten days later, his hair became oily. After that he stopped the exercise, one week later, his hair dried again, then he did the practice and his hair was oily again, so on at last, whenever his hair is dry, he only need to focus attention on the scalp, silently say" work, sebaceous gland." twice a day for 5-10 minutes each time, Four days later the oily hair will appear renewedly.

2.3 Experiments of Removing Wart

The experiment was conducted in the following steps: Immunity was briefly and clearly explained to the participants including some immune leucocytes in blood that are capable of eliminating abnormal cells. While human mind is capable of driving the immune function (such as the immune leukocytes), and the abnormal cells can be killed by psychologically driven immune leukocytes in a certain place. The participants must be relax, and focus attention on the wart, visualize the state that the leukocytes are killing abnormal cells, and psychologically drive the autoimmunity (leukocytes in blood) to kill the wart cells by repeatedly and silently say: "work the immune function to eradicate the abnormal cells." The above processes were practiced twice a day for 20 minutes at each time.

This method was applied to 7 cases, all of which achieved the expected result. In the experiment of wart elimination, 5 cases were the kind of wart with rough (scaled) surface and diameter of about 3- 5 mm, treated by the same method mentioned above. The state of the wart was carefully observed each day. The wart disappeared after the experiment has been conducted for 9-12 days, however, when the practice was immediately stopped, it was observed that the

wart appeared again after 16-20 days. The same method had to be used again to remove them. After the wart disappeared completely, the experiment was not stopped immediately but continued for 5 days. The wart did not appear again.

In the experiment, it was observed that the normal cells located near the warts were intact. The result shows that under the conditions of our experiments the immune function (immune leukocytes) is clearly capable of discriminating which cells should be killed and which cells not, in other words, the immune system is clearly capable of discriminating enemies and friends. Actually under some other conditions, the immune system cannot clearly discriminate enemies and friends (we may present elsewhere).

The other case is to treat the long thin wart whose tissues were difficult to be distinguished from normal muscle by visual observation. The warts of both participants were on their necks, with diameter of about 1.5-2 mm and length of 4 mm and 5 mm respectively. They were treated by the same method, but the time was increased to 2 hours. When the experiment was conducted for 70 minutes, the wart of one participant was broken at the place of 2 mm away from its root, and with a little bled. The wart of the other participant was also broken and bled after the experiment was conducted for 90 minutes.

All participants in the above experiments felt a little stinging. The experiments show that the human immune function can also be regulated psychologically to eliminate abnormal cells.

2.4 Experiments of Controlling Gastric Peristalsis

Gastric peristalsis [27,28] is not visible as in the previous experiments, but it has been known from medical knowledge that gastric peristalsis can cure nausea caused by some kinds of diseases[27,28]. 5 participants were selected. When they felt sick in a car for a period of time, they were told to focus the attention on their stomach, imagining the state of gastric peristalsis, repeatedly and silently saying "the gastric peristalsis is strengthened." for 5-20 minutes, and then the feeling of nausea of all the participants stopped.

Two participants having the history of motion sickness were also selected. Before they felt sick in a car, they begun to do the exercise mentioned above. The result was that they got rid of the motion sickness in this trip.

The above experiments preliminarily showed that several physiological functions of glands, organs and tissues can be regulated by psychological method. Next, it will be further proved that more functions of human body can be psychologically regulated based on the experiments of disease treatment.

During the past 15 years, under the patient's personal insistence, some disease treatment experiments were conducted by psychological methods. In this paper we presented the methods and the results of curing vessels tension related diseases and coronary artery arteriosclerosis.

2.5 Experiments on the Treatment of Vessels Tension Related Diseases

Many kinds of diseases are concerned with vessel tension. In this paper we limited our study on several kinds including upper respiratory tract diseases [29,30], headache [31,32], enterospasm[33] and dysmenorrheal [34-37],

1) Treatment of upper Respiratory Tract Diseases

There are also many types of upper respiratory tract diseases, for example some caused by the invasion of pathogenic bacteria or virus, some because of other pathogeny. 15 patients with upper respiratory tract diseases caused by cold weather (low temperature) did the experiments of psychological treatment. All of participants had the symptoms of cough or runny nose or sneeze, with normal body temperature, without fever.

First of all, the patients must be told that our previous experiments have demonstrated that some functions of human body could be regulated by psychological methods. They will become controllable and understand the "driving words" at most 3 days simply by insisting on the psychological regulation practice, such as practices twice a day for 20 minutes each time. Some function can be immediately regulated even without any training, for example, the blood vessel can become smooth simply with practice for 3-20 minutes.

Secondly, the patients must be told that so long as the blood vessels, especially the numerous hair-like blood vessels

along different directions at the affected area become smooth, the physiological functions of the affected area will become normal, and the symptoms will disappear or get alleviated.

Thirdly, the patients relaxed and focused the attention on the affected area, then imagine the smooth state of the blood vessels, especially the numerous hair-like blood vessels along different directions in the affected area; and repeatedly and silently say: "the vessels become smooth, the hair-like vessels become smooth, the disease is cured."

One of the patients had no fever, but could not sleep every night because of cough. The cough was stopped after himself treated by psychological method for 20 minutes; then coughed again at the next night and treated by psychological method for about 20 minutes, the cough was stopped again, so on, at last cured after a week. Six patients were treated for 10-15 minutes, and their symptoms disappeared and did not reappear any more. Others were treated for 3-10 minutes, and their symptoms were remarkably alleviated.

2) Treatment of Headache

Headache can be caused by various diseases. 12 patients had the headache caused by cold or long-term nervous tension. All of them did not have fever, with normal body-temperature. They treated the headache themselves by using psychological method mentioned above.

Except for one participant, the disease of the rest was alleviated within 5-20 minutes.

3) Treatment of Diarrhea

Diarrhea can be caused by various diseases[33]. The selected 9 participants had diarrhea and bellyache caused by cold, and they had no fever or bloody purulent stool. They treated the diarrhea themselves by using psychological method mentioned above.

Except for one participant, the disease of the rest was alleviated within 3-15 minutes, and their stools became normal or almost normal.

4) Treatment of Enterospasm

Enterospasm is sometimes dangerous as it will cause intense bellyache. One patient was treated by psychological method mentioned above. The disease of the enterospasm was alleviated obviously within 20 minutes. When the enterospasm occured again, the patient treated himself by psychological method again and symptoms were remarkably alleviated again.

5) Treatment of Dysmenorrhea

The pathogeny of dysmenorrhea is not very clear. It was guessed that it may be vessels tension related diseases. One female patient was treated herself by psychological method. The disease was alleviated within 25 minutes. When the dysmenorrhea occured again, she treated herself by psychological method again and symptoms were remarkably alleviated again.

6) Treatment of Deaf

We also conducted the experiments on the treatment of deaf. The ages of the 3 participants were older than 60 years, and the pathogeny is function degradation of cochlea. It was guessed if the vessels of the cochlea are smooth, and the function of ears may be improved. So, the scheme of psychological treatment of deaf, was the same with that mentioned above. Every one was asked to do the exercise twice a day, for 20 minutes each time. 4 weeks later, no efficiency was obtained, and the audition ability of the 3 participants was not improved at all, that is, the experiment was unsuccessful. The causation of the frustrated result is still under researched.

2.6 Experiments of the Coronary Artery Arteriosclerosis Treatment

Seven cases of coronary artery arteriosclerosis patients were treated by psychological method.

Firstly, the patients were told that the HDL in blood has the function to dissolve the atheromatous residue in the coronary artery[38-40] and the work of the HDL can be controlled by psychological method. So, patients may treat their diseases by themselves. When the residue in coronary artery is dissolved, the symptoms will be cured or

significantly alleviated.

Secondly, the patients relaxed and focused the attention on the heart, imagine the smooth state of coronary artery.

Thirdly, the patients repeatedly and silently say: “the HDL in blood works to dissolve the cardiovascular atheromatous residue” twice a day for 15-20 minutes each time.

Chest pain and stuffiness of the 7 patients disappeared and the blood pressure recovered to normal range within1.5- 2 months. The cardiovascular function was improved obviously.

After the symptoms were remarkably alleviated, three of the 7 patients stopped the practice, 7-8 weeks later, chest pain and stuffiness appeared again, and then they conducted the treatment again. Only 7-15 days persistence, all of them recovered to normal.

The treatment of arteriosclerosis must practice under the guidance of expert (doctor), and the purpose is to avoid some dangers.

3 METHOD

The experimental scheme proposed in this study is designed on the basis of physiological, pathological and psychological knowledge as well as sufficient information of near-term physical examination.

The pathogeny must be clear, thus it can be determined that which functions of human body must be regulated by psychological techniques.

Explanation to the participants is important, including three parts: First is the pathogeny of the disease. Second is the treatment scheme. Third is to inform the participants that according to the experiments we conducted before some functions of human body which could be regulated by psychological methods and these functions will become controllable, and will understand the “driving words” within at most 3 days simply by insisting on the psychological regulation practice such as practices twice a day for 20 minutes each time. Some of them can be immediately regulated even without any training for example, the blood vessel can become smooth simply with discipline for 3-20 minutes. So long as the functions of relevant organs or tissues or glands were controlled by psychological method, the disease will be in the treatment.

In this study, four psychological operations were used to regulate the functions of human body. They are easy in both of body and spirit, and focus the attention on the sick place, imagining the state of the relevant functions, and using the “driving words” to regulate the work of the selected functions.

About the visualization, the participants can imagine the working state of the relevant function, and they also can select goal state as well as stimulated state. For example, in the experiment of salivary gland secretion, the participants could imagine the state of salivary gland secreting, or the mouth is full of saliva, or a slice of lemon (or bread) in their mouth, those three states corresponding to those three states mentioned above respectively. The effects of those three visualizations are same in function but difference in intensity, and the stimulated state is of the most intensity. While sometimes it is difficult to find the stimulated state to be imagined. Usually for “driving words” the function is weaker than that of visualization, but the utilized scope is much wider than any other psychological operation and the efficiency is rather good. Visualization and “driving words” can be together or solely used to control the functions of human body, both of which are of desirable efficiency but the combined is better.

Actually, many other psychological operations can be used to regulate the physiological functions of human body such as hint, hypnosis, and so on, which will be reported later.

4 DISCUSSIONS

The starting point of this study is a deep-breathing exercise. Usually, the lungs work automatically orunder mind control, when a deep breath is taken. It is supposed that some other functions of human body probably also have two function modes i.e. automatic and psychological regulation.

In this study, more than 60 cases of regulations of physiological functions including 34 cases of disease treatment, using psychological techniques were conducted. The results indicate that the physiological functions of human body can probably be regulated by psychological operations, and the probability of disease treatment by using psychological techniques is much more, the healing efficacy is excellent or rather good. Besides, the side effects may be little.

All the treatments using psychological method presented in this paper were conducted by the patients themselves. Actually, the treatment could be conducted by doctor (we will report later). If the treatments are conducted by the patients themselves, the cost must be low.

Some disease treatments using psychological techniques are rather simple for example, the treatment of vessels tension related diseases (the cure time is only several minutes). Those treatments can be used easily to examine the efficacy of the psychological techniques in the regulation of physiological functions of human body.

Any treatment method of disease is not almighty, and some can be applied in an extensive scope, while some cannot, and different method has its preponderant scope. Some ignored methods may have some advantage in the treatment of some diseases which have not been developed. There are many methods of therapy, healthcare and cosmetology. The psychological methods may also possess some potential that cannot be ignored.

The shortcoming of the study is that most of the results belong to the category of individual cases, so they may be accidental. To solve the problem, we must conduct the experiments with expanded scale. Here the author calls for participation by more interested people, for development of cooperative studies, for the wellbeing of mankind.

We tried to apply for research funds. If we have enough funding, large-amount experiments will be conducted using some instruments. Regrettably, no one was interested to support us up to now.

5 CONCLUSIONS

The experiments we conducted show that some physiological functions of human body probably have two function modes i.e. automatic and psychological regulation. It is possible by using psychological techniques to treat diseases.

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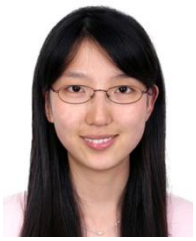
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