



Appropriate medical practice—natural forces and medical intervention

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[Abstract] Medical practice is the most important step in fulfilling the medical purposes of medical theory. Appropriate medical practice not only can help treat and prevent diseases, but also is beneficial to the maintenance and promotion of health. Appropriate medical practice requires full knowledge of the natural forces that maintain the human body. Medical intervention should be considered as a last resort. Appropriate medical practice should respect the human body's natural forces and understand the needs and limitations that can be endured by the body's natural forces, instead of ignoring or even damaging, suppressing, or replacing these forces.

[Key words] Natural force; Medical intervention; Medical practice

1 Introduction

The instance life is born, a corresponding natural force is generated, which accompanies the human through birth, old age, sickness, and death. Organic macromolecules began to appear on Earth about 4 billion years ago, prokaryotes were introduced to this planet 1.5 billion years ago along with the nuclear envelope within which the hereditary material, the gene, is enclosed. Multicellular organisms appeared in the oceans 800 million years ago, and these oceanic organisms began to migrate toward land 400 million years ago, thus starting the growth and development of terrestrial plants, insects, and vertebrates. From the origin of life to the entire developmental process, the

biggest driving power is the natural force. Different environments create different organisms. To adapt to environmental changes, different organisms constantly improve their natural forces in the process of evolution to maintain continuous reproduction and evolution. On the contrary, they constantly improve and enhance their natural forces of organisms. This pattern and its spiraling ascension follow the single rule of "natural selection/survival of the fittest".

2 Composition of natural force

Natural force is derived from life and is the concrete manifestation of life ^[1]. The natural forces of human life encompass the following capabilities as follows.

(1) Self-generation: This is the ability of the human body to structure and generate itself. For example, the respiratory, digestive, and the other systems that are parts of the human body have undergone continuous self-structuring and self-

generation during the evolution process without the involvement of any outer forces, and this shows the characteristic of emergence;

(2) Self-coupling: There is strong coupling among the organs, tissues, cells, and molecules of the human body so that they can skillfully and indiscriminately integrate as one whole and complete the body's physiological functions, without the intervention of outer forces;

(3) Self-repair: During instances of local injuries that affect body functions, the human body can mobilize all the strength required to repair injured cells or tissues and can also fulfill self-repair with the help of outer forces to restore normal body functions;

(4) Maintenance of metabolism: The human body is under a continuous state of metabolism and renewal to eliminate old tissues, cells, and metabolites and replace these with new tissues, cells, and essential metabolites to maintain normal body functions;

(5) Self-controlled balance: Chinese medicine calls the essence of life's existence "balance", whereas Western medicine calls it homeostasis. Balance can be observed in base pairing within the double-helical structure of DNA. A single base mutation or translocation can cause disruption in some functions and can even be life-threatening. The human body achieves balance through various instabilities within the body to maintain overall homeostasis. Balance is maintained in every constituent such as the content of total body-fluids and aqueous electrolytes, acid-base balance constant body temperature, and constant oxygen supply. These are all concrete manifestations of life's natural forces;

(6) Self-protection: People often think about the body's immune system when thinking about self-protection. The immune system provides a biological response by identifying and removing invading agents such as microorganisms and antigens. Organs, cells, and molecules of the immune system of higher organisms together achieve the protective functions of defense, homeostasis, and surveillance, which are together called immunity. The human body protects against the invasions of various harmful substances

in everyday life with the self-protective mechanisms such as vomiting and diarrhea to remove toxic substances from the digestive system, coughing to assist in removing pathogens from the respiratory tract, and fleeing when faced with danger. These natural responses of the human body can help in resisting the invasions of many pathogens. The prevention of many diseases is based on these types of force, and the best method of treatment in such scenarios is no treatment; and

(7) Mental control: The six aforementioned natural forces can also be observed in other animals. However, humans are said to be the most intelligent of all organisms, and we possess a highly sophisticated nervous system that can produce thoughts, cognition, and attitudes that have important effects on the body's natural forces. It can command and control, which is an ability few other animals possess. Although human eyes are not as sharp as those of eagles, nose is not as sensitive as that of dogs, ears are not as keen as those of bats, and legs are not as agile as those of monkeys, humans have an intelligent brain that can integrate all other natural forces to form an even more powerful natural force.

Indeed, the abilities of these types of natural forces may be both positive and negative, and the two fulfill mind-body interactions. According to Professor DU Zhizheng, the so-called natural force of the human body is the collection of the aforementioned seven natural forces^[1]. Indeed, medical research on these forces is far from complete, and there will undoubtedly be more natural forces that remain to be discovered. At present, the aim is to further understand the essence and synergistic relationships between these natural forces and use them as the basis and entry point for medical interventions to provide appropriate services for maintenance of health, disease prevention, and treatment.

3 Essence of natural forces

The natural force of the human body is an abstract concept, and it is difficult to provide a unified and precise definition. However, it is indeed an important

and existent phenomenon (function) and definitely not a "supernatural force", which goes against and exceeds the rules of natural science. It is neither a concept promoted by idealism nor the target of description by religious theology. Hippocrates pointed out that yellow bile, blood, phlegm, and black bile were the four fluids that ran through the human body. They were naturally formed within the body, endlessly being expended and regenerated to maintain a balanced status, and had important functions in maintaining health. The yin-yang balance and five elements theory of Chinese medicine are similar to the four-humor theory. They are all based on the inherent properties of the human body; thereby constructing a theoretical framework to explain diseases. Therefore, the natural force is in fact intrinsic balance, and this is emphasized in both ancient Western and Chinese medicine; however, modern medicine emphasizes that natural force may be the homeostasis of the body's inner environment.

The balance (homeostasis) of the body's inner environment is the basis of existence and maintenance of free and independent life. In fact, nothing is ever stable, constant, or static within the human body. Homeostasis is a state that can change but is relatively constant. Every part of the human body is always fluctuating between balance and imbalance, and it is this space between balance and imbalance, or sometimes balance and sometimes imbalance, that can solve and stabilize the received outer stimulants. In turn, a higher level of relative balance is attained, called hyperstability, which is an overall balance based on the imbalance of each subsystem. This is also what we once called people-oriented healthcare^[2].

The theory of philosophy suggests that external causes are essential requirements for things to evolve, whereas internal causes are the basis for changes in things. External causes exert their function through internal causes, and these two can act in an interchangeable manner. The correct understanding of the meaning of balance within the body is that exchange of substances, energy, and

information between the human body system and the surrounding environment occurs continuously. The body absorbs ordered energy from the surrounding environment and discharges disordered energy generated from metabolism into the surrounding environment. Once ordered energy increases to a certain amount, life will spontaneously attain a hyperstability state within time, space, and function. This is called the body's ability to self-organize and in turn, forms the natural force. Natural force can manifest before or during self-organization, and this is also what we once called spatial healthcare^[2].

The hyperstability of the human body, which takes into account the balance of each subsystem, is dynamic and changes over time. We know that space-time is the basic conceptual model that explains the existence of all matter; however, we often put more value on space and neglect time. In ancient times, humans placed a high value on the relationship between human life and nature's temporal changes. In the agricultural era, the Qin Dynasty established the 24 solar terms of the traditional Chinese calendar based on the relationship between the sun and the Earth and used this system as the time standard to guide agricultural practices. This has been very effective over hundreds and thousands of years and is said to be one of China's top five inventions. In 2016, the 24-solar terms of the traditional Chinese calendar was also added to the world's intangible cultural heritage list by the United Nations Educational, Scientific, and Cultural Organization. This is a summary of the sun's effects on the life pattern of agricultural products, which reflects experience and the insight of human intuition. However, it is only applicable to China and regions in the middle latitude of the northern hemisphere.

Further, human life has an important relationship with time, and the rules regarding this relationship are not set in stone. For instance, in "The Yellow Emperor's Classic of Medicine," there are 208 theoretical propositions composed of the word "moon" and 400 prepositions and terms with the

core term "time." The sun represents "yang," and the moon represents "yin": and yin-yang is the essence of traditional Chinese medicine. When learning about diseases, Chinese medicine emphasizes more the importance of changes in time and function, whereas Western medicine emphasizes the importance of abnormalities in space and structure of the human body. In treating diseases, "The Yellow Emperor's Classic of Medicine" pays close attention to the relationship between time and therapeutic effects; waiting for the best time requires immense patience in treatment based on Chinese medicine. The same can be said for Western medicine. For example, in vitro fertilization emphasizes the relationship between time of fertilization and success rate. This is also what we once called temporal chrono-healthcare^[2].

4 Medical intervention and maintenance of natural force

In the early period of practicing medicine, there were very few medical techniques and pharmaceutical products; hence, both the Western and Chinese systems of medicine greatly emphasized the importance of the natural forces of the human body. "The Yellow Emperor's Classic of Medicine" suggests the idea of "correspondence between man and nature and unity of man and nature", indicating that medical intervention should correspond to and fit with the operational pattern of the human body and its natural forces. Hippocrates made the following observations: "natural forces within us are the true healers of disease"; "it is a method nature found for itself"; "nature taught itself and although it has not undergone education or training, the way of nature is correct"; and "The healing of diseases is achieved through natural forces, and the purpose of treatment is to help these natural forces"^[3]. Indeed, many diseases can be healed with the body's natural forces. For example, 1/3rd of the prescriptions administered by American doctors are for placebos; an Israeli study found that 60% of interviewed doctors and nurses administered prescriptions for placebos on purpose and found it to be effective^[1]. The effectiveness of these placebos in

treating diseases may be due to the manifestation of the human body's natural forces healing diseases.

Can medical intervention maintain the balance of the human body's natural forces? Can the human body's natural forces positively accept medical intervention? The answers to these questions completely depend on whether the medical intervention maintains or disrupts the inner balance of the body's hyperstability state. Medicine, being the field concerned with knowledge of treating diseases and saving lives, has always been based on how the doctor performs medical intervention. The principles of medical intervention should be to respect the body's natural forces, adapt to the requirements of these forces, and support and maintain these forces according to the needs for the development of these forces within bearable limits of the human body. Medical treatment should not ignore natural forces or even arbitrarily harm, suppress, or replace them. To achieve these purposes, one must encompass the following concepts.

4.1 With strong healthy qi inside, pathogenic factors cannot invade the body

Maximum invariance of the hyperstability state within the body should be ensured to avoid any damage or disruption to hyperstability by medical intervention.

4.2 Know yourself and know the enemy; then you will win all battles

The human body's hyperstability is constituted by various substabilities. Refrain from performing medical intervention before having a detailed understanding of each substability within the hyperstability state, since one wrong move can affect the entire situation. Any single process within the human body is interdependent with other processes, and disrupting one process can cause damage to other processes, in turn inflicting adverse consequences to the entire living being.

4.3 It is not worth losing a great deal through trying to save little

The human body has strong repairing

capabilities, and these should be protected and facilitated at all costs. Disrupting any process within the human body may disrupt or terminate its self-repairing function, and this function cannot be replaced by any stimulus from the outer environment. In the end, such types of medical intervention could cause a great deal of loss by trying to save a minor aspect. The purpose of medical intervention should be to resolve the difficulties that are hard to overcome during the operation of the hyperstability rather than to replace the mechanism of self-correction by the hyperstability. Medical intervention should solve those life-threatening problems that cause substabilities to continuously deviate from stability and which the self-repair mechanism does not have enough time to respond to.

4.4 The part is limited and the whole is important

Medical intervention toward the body's substabilities needs to follow the overall hyperstability. When treating diseases or even saving lives, medical intervention, and even destruction are often required to be performed on the localized natural processes that cause severe consequences to life. However, such intervention and even destruction must respect and maintain the natural forces of the whole.

4.5 Proceed step by step and defeat one by one

Some simple diseases of the human body such as common colds are transient phenomena and self-heal with time progression without treatment. As for complex diseases, when one intervention cannot achieve the purpose, the disease can be divided into several small targets and appropriate medical intervention can be carried out in succession to fulfill the final purpose of treatment, such as in the treatment of hypertension or using hormone supplementation therapy. Medical intervention in progressive small steps is the best method to adapt to the natural forces of the body and can avoid sudden interventions that cause destruction to the hyperstability.

4.6 Strengthen the vital "qi" to eliminate pathogenic factors and cure symptoms while consolidating the origin

For diseases with unknown etiologies, a flanking method should be adopted. On the one hand, regulation of the injured mechanisms caused by the disease on the human body should be performed to restore function; on the other hand, strengthening of the overall restoration mechanism should be done to prepare the body and fulfill its requirements to defeat the disease.

4.7 When faced with disease, expel the pathogenic factors and strengthen the body

Medical intervention for patients who are critically ill should not be rushed to attain a cure faster, and neither should treatment be given up. Instead, it is advocated for the treatment to coexist with the disease. Treatment should be carried out to rapidly control the continued deviation of the substabilities to prevent changes to homeostasis and eliminate the life-threatening aspects of the condition before attempting to cure the disease.

4.8 Do not perform on others what you would not perform on yourself

An artificial life support system can be used to save lives. However, one must know that the hyperstability within the patient's body is a very complicated state, and when the problem stems from the roots, no artificial life support system will be able to respond to or replace such a situation. Artificial life support systems should be used appropriately and at appropriate times. Neglecting it or using it too late may lead to a missed treatment opportunity, whereas using it too early or for a longer duration may not be beneficial in the protection and maintenance of the human body's natural forces. This concept can be observed in some patients who are successfully treated but are unable to recover from the disease and suffer from long-term weakness.

Indeed, the maintenance of the human body's

natural forces cannot be made absolute. For example, in certain infectious and acute diseases and severe traumatic injuries, medical intervention should be carried out as soon as possible; otherwise, the opportunity for treatment will be missed. This is particularly the case in which certain modern medical technologies can save some patients from death. In these instances, the primary consideration should always be to save lives before making the consideration to maintain and regulate the body's natural forces.

5 Advantages, disadvantages, and limitations of medical intervention

Contracting a disease is related to the fluctuation of the body's natural forces, and medical intervention is best used to assist these natural forces. However, the leaps and bounds in progress made by modern medicine, immense depth of discoveries in medical research, and continuous emergence of new technologies and drugs have led to the disregard of the actions of natural forces toward fighting diseases. Instead, blindly carrying out medical interventions has gradually increased the incidence of iatrogenic and drug-induced diseases. This has not only resulted in high medical costs, but also ethically deviated from medicine's original intentions and will inevitably result in a backfire.

Chronic diseases, including cancer, which currently plague humans are mostly due to dysregulation of stability due to the long-term overload of stress-related reactions on the body and are local manifestations of the overall dysregulation of the body's stability. There are generally two methods to treat chronic diseases: one is for the disease, in which the aim of treatment is to eliminate the source of disease; the second one is to adjust the balance of the body according to the natural forces of the body. The former is medical intervention, whereas the latter is the promotion of natural forces. In cancer treatment, traumatic medical intervention and gentle conditioning for self-repair have always been contradictory. The concepts to treat symptoms

without harming the roots and treating the root causes without interfering with the symptoms are simple, and yet require very subtle manipulation. The control on the extent of manipulation can by no means be stipulated in text according to clinical guidelines. Rather, it requires philosophical speculation with both round and square to complete. The practice of modern medicine is often operated with extremist thoughts and practices that include the pursuit of peculiar treatments, suppressing lesions, eliminating pathogens, blocking mutations, removing lesions, replacing affected organs, and replacing affected genes. These practices are manipulated by a kind of hidden thought which aims to eliminate sickness and achieve immortality. Under the influence of such thoughts, generation after generation of inhibitory drugs is produced, and generation after generation of medical technologies are replaced, all aimed at directly attacking the pathogenic factor. Such intervention ideologies can definitely achieve immense effects within a stipulated amount of time, especially in the treatment of infectious diseases with clear etiologies. However, when applied to noninfectious diseases, such types of intervention is followed by the destruction of the human body's inner environment, dysregulation of inner balance, diminishing of natural forces, and loss of some body functions. In fact, disease itself is a kind of natural force. For example, vomiting, diarrhea, coughing, and pain are all manifestations of diseases and are types of natural mechanisms to protect the human body. Illness is both bad and good; it is a component of life and health. We cannot ignore the positive meaning of illness on the human body and must thrive to pursue the beneficial interactions between illness and natural forces.

Natural forces are double-edged swords that can both defend against outer invasions and cause diseases through over- or under reactions that are not beneficial to health. There are limitations to the natural force, and once these limitations are exceeded medical intervention is required to maintain homeostasis.

There is too much rather than too little medical intervention toward diseases and health maintenance in China, excluding poor and remote regions. This type of excessive medical treatment has formed habits; for example, when doctors are prescribing drugs or medical technology to patients, they talk more about the effects but not the side effects. The Medical College of Wisconsin in the United States observed 112 cases of patients with cerebral arterial stenosis where one group of patients were treated with antiplatelet treatment regime of Plavix (clopidogrel) + aspirin and achieved a stroke incidence rate of 10% within 30 days compared to another group of patients who received both stent and drug treatment, with a high stroke incidence rate 34%. Another study in the USA published in *The Lancet* showed that 40% of surgeries performed were unnecessary. Of the 234 million cases of surgeries performed annually around the world, 7 million resulted in surgical complications and 1 million resulted in postoperational death^[1].

As another example, in the 1930s, a study conducted in New York investigated thousand 11-year-old children and found that 60% had their tonsils removed whereas the remaining 40% had once been required by the doctor to undergo tonsillectomy. In the 1970s alone, 1 million children had undergone tonsillectomy in the US, and 60% of these children were under the age of 10. Tonsillectomy was the preferred treatment for sore throat, fever, and enlarged tonsils at the time. However, researchers from the Netherlands observed 300 children under the age of 6 with annual recurrences of sore throat and found that the children who underwent tonsillectomy had lower incidences of sore throat and bronchitis within 6 months (but without statistical significance). There was no difference after 2 years^[1]. It is known that tonsils play an important role in the body's immune function, and the consequences of tonsillectomy to the immune system and the possible inheritance of loss of tonsil function due to such surgical procedures are not known. This is a classic case of using

medical intervention to harm the natural force, the consequences of which are unknown. This is indeed an example of "much ado about a small matter".

Before modern medicine, the diagnosis of disease primarily depended on the subjective feelings of the patient, and the patient reserved the primary voice in stating whether they are ill or not. In the present day, however, disease has become defined by abnormal structure or function of the body determined by examinations using medical devices or analysis of laboratory data. Test results have become the primary bases on whether a patient is ill or not, and diseases are assessed in detachment from the patient's subjective feelings.

The problem is that the changes detected by medical devices are abnormalities without symptoms, which means that there is a risk of developing diseases in the future but at present, by traditional means, the observations are merely risk factors. Therefore, there is a major controversy over whether to perform medical intervention against these factors and an even bigger controversy over the effects and efficacy of the medical intervention after it is carried out. For example, administering antihypertensive drug treatment for those with blood pressure >140/90 mmHg was able to prevent cardiovascular incidence for 2 out of 100 people within 10 years; however, 4 people still suffered from the disease and 94 did not suffer from the disease despite not being under medication. These 94 people would have to take antihypertensive drugs for the rest of their lives. In 2000, China lowered the diagnostic cutoff points for hypertension, hyperglycemia, and hyperlipidemia, which increased the total number of patients with these chronic conditions by 100%, based on calculations by the population in 2000. This also resulted in 360 million more patients diagnosed with these chronic conditions from 2002 to 2009. In 2010, the total cost incurred by the National Health Commission of the People's Republic of China was 480 billion RMB and if all the new patients were treated with drugs, the costs would increase by 56%^[4]. In 2017,

the US again lowered the diagnostic cutoff point for hypertension to 130/80 mmHg. By this standard, China would see 300 million new patients with hypertension; however, it was prudent for China to not adopt the American standard^[5]. If pathologic microscopic examination was conducted on patients who suffered accidents or noncancerous diseases, 36%-100% would have thyroid cancer, 7%-39% of female patients would have breast cancer, and 30%-70% of male patients would have prostate cancer. A US study found that the incidence of prostate cancer is 8% in males aged 20-29 years, 31% for males aged 30-39 years, 65% for males aged 40-49 years, and 83% for males aged 70-79 years. A radiology study found that, among the general population who had not been diagnosed with cancer, up to 50% of people who smoke had suspected lung cancer nodules, 15% of those who did not smoke had suspected lung cancer nodules, 23% had suspected renal cancer mass, 15% had suspected liver cancer mass, and 67% had suspected thyroid cancer nodules^[4].

Many of these minor cancer diseases are indolent cancers, which mean that they remain stable and unchanged over long periods of time and will not cause abnormality or death throughout the patient's lifetime. Medical intervention should not be carried out in patients with indolent cancers and the consequent postoperational survival time and I rates should not be demonstrated as the achievement of medical intervention. Providing intervention for this group of people not only involves a large amount of cost, but also incurs psychological pain to the patients. Furthermore, the intervention might even stimulate the cancer to enter an active phase and cause metastasis or resistance to anticancer drugs. At the very least, the patients would suffer from posttreatment discomfort, change in body functions, or even other complications. Similar situations can be observed in other countries as well. In 1993, Korea began to develop thyroid examinations and the number of thyroid cancer patients continuously rose by 14 times within 18 years by 2011; yet, the number of deaths from thyroid cancer did not change

in Korea within the same period (mortality rate might have dropped)^[4].

The idea of uncontrolled and unlimited medical intervention will spawn "medical madness" at the cost of sacrificing the human body's natural forces. Science is used to understand the world and can have endless possibilities; however, technology makes changes to the world and there should be limitations and boundaries. This should be followed for both medical research and medical technology. What is the relationship between them? And what is used to grasp this relationship? Medical technology determines the speed of advancement, whereas medical humanities determine the direction of advancement. Advancement in the wrong direction will lead to greater harm at greater speed.

Currently, many factors have been found to have a great influence on enhancing natural forces. We should continue to discover, excavate, and increase these factors, which may be summarized as follows:

(1) The influence of psychological factors on natural force maintenance: "The Yellow Emperor's Classic of Medicine "states that" excessive joy injures the heart, excessive anger injures the liver, excessive worry injures the spleen, excessive grief injures the lungs, and excessive fear injures the kidneys." The incidence of most functional diseases is a lot lower in those individuals who are psychologically healthy than those who are not psychologically healthy. Similarly, when the same treatment is used on those who are psychologically healthy and those who are not, the treatment efficacy is higher for those who are psychologically healthy.

(2) The influence of medical education on natural force improvement: Modern medical education mainly imparts knowledge on the diseases but neglects the influence of the body's natural force on diseases and even health, resulting in the lack of understanding natural forces by medical students. Once these medical students enter the clinical environment, they only use medical technology or drugs to treat patients according to guidelines, and in many situations, this will damage the body's natural forces.

(3) The influence of medical research on natural force improvement: At present, most medical research studies are focused on theories and methods of medical intervention. For example, in the treatment of coronary heart disease, billions of dollars are spent each year on statin-type drugs to lower cholesterol. Yet, there is still a major controversy over whether the treatment is actually able to lower the incidence and mortality rates and whether it can extend lives. In addition, the use of antibiotics has caused drug resistance, whereas fecal microbiota transplantation (FMT) has been used to treat refractory diarrhea. Anticancer drugs are ineffective in treating cancer, whereas immunotherapy, which has the purpose of increasing the body's immunity, has achieved success. These are all successful cases of terminating medical intervention and increasing natural forces. We need to integrate external medical intervention with internal natural forces as medical treatment technologies and knowledge, and this is called holistic integrative medicine (HIM)^[6]. Three of the most successful examples of HIM are presented as follows.

Chimeric antigen receptor T-cell (CAR-T) therapy: A complete CAR-T treatment process can be divided into the following five steps: extraction, modification, amplification, infusion, and monitoring. In the extraction step, T-cells are extracted from the patient's body (it establishes the important role of T-cells, which can kill tumor cells in tumor treatment). In the modification step, chimeric antigen receptors are transfected into the extracted T-cells, and in the amplification step, the resulting cells are amplified. These three steps can be viewed as the integration of artificial medical intervention with nature's immune function performed within a man-made in vitro environment, in effect initiating and enhancing the body's own immune cells in the identification and killing abilities of tumor cells. The infusion step infuses the amplified CAR-T-cells back into the patient's body to carry out targeted killing of tumor cells, thereby successfully transferring external forces to internal forces, which is the process of intertransformation and interaction between external and internal forces. This

treatment has achieved significant therapeutic efficacy in the treatment of hematologic diseases and solid tumors.

FMT: FMT is the transplantation of functional microbiota from a healthy person's fecal matter into the patient's intestines to reestablish the intestinal microbiota and achieve treatment of intestinal or nonintestinal diseases. The functional microbiota of a healthy individual is a natural force of the body. The artificial medical intervention of FMT involves conducting rigorous selection for healthy microbiota and a standardized specimen preparation before the fecal material is transplanted into the patient's intestines. FMT has already achieved good therapeutic results for multiple diseases including *Clostridium difficile*-enteritis, inflammatory bowel disease, other intestinal diseases, and other nonintestinal diseases including diabetes, liver cirrhosis, and tumors. In 2015, Zhang Faming et al. reported the use of FMT to treat severe Crohn's disease complicated by intestinal perforation. In 2017, He Xingyang et al. reported that FMT had achieved unexpected effects in the treatment of epilepsy. These are the remarkable achievements made by Chinese scholars in the integration of medical intervention and natural forces of the human body in clinical diagnosis and treatment^[7].

Diabetes: In China, the prevalence of diabetes had increased from 0.67% in 1980 to 10.9% in 2015, and it ranks number one in the world with 110 million patients. Despite the continuous emergence of new drugs to treat diabetes and the constant updating of diabetes treatment guidelines, relying on medical intervention has not been enough to effectively contain the evolution and development of the disease, regardless of whether cases and treatment occur in developed countries like European nations or the United States or in developing countries like China. The hurdle of effectively preventing and controlling chronic diseases such as diabetes has exceeded the scope of clinical medicine and has become a public health problem that requires an urgent answer. The promotion of healthy lifestyles

in an effort to support the body's natural forces may be a more effective method to treat the occurrence, development, and outcome of diabetes^[8].

In China, the prevalence rate of diabetes is as high as 10.9%, and what is more important is that up to 35.7% of adults are prediabetic. Without proper and timely intervention to prevent these patients from developing type II diabetes, the number of patients with diabetes in China will experience explosive growth in the next 20 years. Prediabetes is a reversible state of disease between a normal person and a patient with diabetes. Interventions among the prediabetic population could decrease the risk of the disease developing into type II diabetes by 58%. In this scenario, it should be considered whether it would be effective to take lifestyle-intervention-based approaches to support the body's natural forces rather than taking medical intervention approaches. A study on diabetes prevention has been performed since 1986 in Daqing, China, and this is the first randomized controlled trial in the world that proved that lifestyle intervention is effective in preventing diabetes. They provided the population with nutritional and exercise instructions including consuming less sugar, eating more vegetables, and increasing exercises. Results revealed that a 6-year lifestyle intervention (nonmedical) decreases diabetes incidence by 30%-50%. Later on, the results from further follow-up observation up to 20 years demonstrated that lifestyle intervention has long-term and continuous decreasing effects on development of diabetes from prediabetes. On the contrary, patients predisposed to diabetes who did not undergo lifestyle intervention had a diabetes incidence of 92% after 20 years^[8].

A study conducted in the US also found that 3 years of low-sugar and low-fat diet coupled with a moderate level of exercise could decrease the risk of development of diabetes from prediabetes by 58%, which was even better than the results achieved by treatment with metformin. Additionally, studies from

Finland, Japan, and India obtained similar results. Furthermore, lifestyle interventions without drug treatment have a continuous effect of up to 7 years, whereas the preventive effects on diabetes reduce after 17 weeks of drug discontinuation for those who undergo drug treatment. A study by China's Ruijin Hospital on the Shanghai population also demonstrated that 61.1% of newly diagnosed patients with diabetes were able to achieve disease-control standards within 3 years simply by controlling diet and exercising^[8].

In summary, the body's natural forces play an important role in diabetes prevention. Change in lifestyle enhances the body's natural forces in treating diabetes, whereas overtreatment of diabetes will affect the body's natural forces.

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