



# Lifestyle & Preventive Medicine Comprising Scientific Exercises, Right Eating, Mindfulness, Vitamin Pooling

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## Clinical Note

Volume 7 Issue 4

Received Date: August 29, 2022

Published Date: October 03, 2022

DOI: 10.23880/doi-16000262

## Abstract

The ideology behind lifestyle & preventive medicine focuses on protecting, promoting and maintaining health and well-being through personalized lifestyle approaches. It also aims to avert "disease, disability, and death" on an individual basis, as well as on a large scale in communities and populations through a calculated lifestyle based on selective scientific exercises, right eating, programmed lifestyle pillars and modalities.

**Keywords:** Prevention; Medical Emergency; Scientific Exercises and Programmed Lifestyle Pillars

**Abbreviations:** SPM: Suspended Particulate Matter; NCDs: Non Communicable Diseases; TSPM: Total suspended Particulate Matter; CVD: Cardiovascular Diseases.

## Introduction

Preventing chronic diseases – the diseases of the 21<sup>st</sup> century – has to involve improving lifestyle for the individual (clinical medicine) and populations (public health). This completely revised third edition has been written for translation into several languages to assist in the spread of the knowledge about chronic disease prevention and treatment throughout the developed world [1]. A lifestyle medicine approach differs from traditional conventional medicine (hereafter called conventional) in that it is aimed at modifying the behavioral and lifestyle bases of disease, rather than simply treating the disease. As such it requires the patient to be an active partner in the process rather than a passive recipient of medical care. In fact the term patient is really no longer appropriate in this setting unfortunately, no fully acceptable alternative term has presented itself,

hence the need for a comprehensive approach to understand how to involve the patient in his or her self – management. Lifestyle medicine differs from nonmedical clinical practice in that it may include medication (e.g., for weight control), and it differs from purely behavioral approaches in that it examines environmental etiologies as well as individual behaviors [2].

Exercise and nutrition are the penicillin of lifestyle interventions and Psychology is the Surgery by which homeostasis is restored in lifestyle-based chronic diseases. Hence, psychological processes, together with other more specific treatment approaches; ----- make up the bulk of lifestyle medicine. However, as lifestyle interventions in medicine are a growth area, there is still much to be learned and a lot that is difficult to objectify. This becomes particularly apparent when discussing exercise prescription for various ailments or learning positive psychology to combat mood disorders. Although specific prescriptions for different lifestyle based ailments are now emerging, there has only recently been an appreciation of the general importance of

lifestyle in what have often otherwise been thought of as medical issues. Hence, evidence based prescription is not yet available in several areas. Where this is the case, we have attempted to compensate by providing recommendations based on the available data and the careful reasoning of our experienced contributors [3].

The richest and the technologically most advanced countries this modern world, without any immediate influences of other societies, provide a windscreen through which lifestyle and environmental problems arising from modern development can be viewed. Most of the Indian cities are highly polluted by suspended particulate matter (SPM). Due to non-implementation of effective anti-air pollution measures, the air pollutants continued to increase in various cities of India. The excessive presence of TSPM (Total suspended Particulate Matter) in Mumbai, Delhi and --- Calcutta was subsequently confirmed in a survey carried out by WHO in the year 1995 [4]. Our Indian Government (Almost all Governments, throughout the World) had already taken action against air pollution by introducing green energy policy. Burning of fossil fuels causes heavy air pollution and due to this, some Governments are investing in wind energy, solar energy and other renewable energy to minimize the heavy air pollution effects. Public awareness is to be created to reduce the usage of own vehicles for ordinary and unimportant travels [5].

Biomedical risk factors are derived from body measurements such as weight, blood pressure, and blood cholesterol. Because they are within the body, biomedical risk factors reflect a comparatively direct and specific measure of risks for health. However not everything that can be measured counts. Although biomedical risk factors often can be measured with great precision, their resulting statistical tight correlations with disease-outcomes sometimes attributes them higher significance than other risk factors such as stress, due to the fact that the latter are much harder to accurately assess in population surveys [6].

### The Current Gloomy Scenario

Due to increasing importance to business competition, education, career and money, today's society is running behind them and driving away its proven simple lifestyle forbidding good health. Negligence to personal health leads to vicious circle of bad health of all the family members. As a result, there is rise in obesity, blood pressure, diabetics and heart diseases at the young age. The mental stress also fuels the problems. To remain in the rat race, one utilizes the best period of life in hard work under tension ignoring his/her health. In this age itself, a no exercise life, eating out frequently, irregular and imbalanced food, late night sleeping

and addiction spoils people and drive them away from good health. In the beginning the attitude is "Its O.K" but then surely it becomes "This itself is O.K" [7].

### Prevention Through Lifestyle Medicine-The Best Remedy

When it comes to lifestyle diseases, instead of treatments & medications for the acquired diseases, one should strive for preventing all diseases and this alone is the best remedy. For it there is a grave need to make suitable changes in the lifestyle. We should learn to strictly watch how much and what we eat and how much we exercise. To ask such a question to oneself will be a turning point in case of inheriting health in your life. Changing one's lifestyle is an easy and achievable task and helps you prevent chronic diseases [7].

### Lifestyle Diseases & the Importance of Lifestyle & Preventive Medicine

Lifestyle diseases are ailments that are primarily based on the day- to-day habits of people. Habits --- detract people from brisk activities and push them towards a sedentary routine life. It will cause a number of health issues that can lead to chronic non-communicable diseases, which will have near life-threatening consequences. Non communicable diseases (NCDs) kill around 40 million people each year, that is around 70% of all deaths globally. NCDs are chronic in nature and the main types of NCDs such as cardiovascular diseases (CVD), stroke, obesity, sleep disorders, diabetes and certain forms of cancer are heavily linked to lifestyle choices, and hence, are often known as lifestyle diseases, which can be prevented and even many times reversed through lifestyle medicine. Lifestyle medicine comprising of scientific exercises, right eating, stress & sleep management, vitamin pooling and avoiding addictive substances can do a lot of wonder in preventing chronic diseases when coupled with individual awareness [8].

### The Major Lifestyle Diseases Caused by Wrong Lifestyle Choices, Which Can be Easily Prevented:

- CVD-Cardiovascular diseases are a group of disorders of the heart and blood vessels and may include:
    - A. Ischaemic heart disease
    - B. Stroke
    - C. Peripheral arterial disease
    - D. Congenital heart disease
- CVDs are the topmost cause of death globally and account for more than 17 million deaths per year. The number is estimated to rise by 2030 to more than 23 million a year.

- **Diabetes:** Diabetes is a metabolism disorder that affects the way the body used food for energy and physical growth. There are 4 types of diabetes: Type 1, Type 2, Gestational, and Pre-Diabetes (Impaired Glucose Tolerance). Type 2 is the most common diabetes in the world and is caused by modifiable behavioral risk factors.
- **Cancer:** Cancer affects different parts of the body and is characterized by a rapid creation of abnormal cells in those parts and can invade other parts of the body as well. More than 7 million people die of cancer each year and 30% of those diseases are attributed to unhealthy lifestyle choices.
- **Obesity:** Obesity has reached epidemic proportions globally, with more than 1 billion adults overweight-at least 300 million of them clinically obese - and is a major contributor to the global burden of chronic disease and disability. Obesity and overweight pose a major risk for serious diet-related chronic diseases, including type 2 diabetes, cardiovascular disease, hypertension, stroke, and certain forms of cancer [9].

### Prevention & Reversal of Lifestyle Diseases-The Need of the Hour

By including a precise scientific exercise regime, eating a high-fibre & low-fat diet, controlling body weight, healthy sleep pattern, stress management & staying away from addictions with a holistic vitamin pooling “will and for sure” will help mankind to prevent & reverse lifestyle diseases. These preventive and easily adaptable measures drastically reduce the risk of obesity, cardiovascular disease, cancer, diabetes and premature death.

### The Key Modalities of Lifestyle & Preventive Medicine

#### Scientific Exercises or Physical Activity

Scientific exercises or Physical activity is a vitally important component to overall health and for both prevention and treatment of various diseases. Regular scientific exercises and programmed individual exercises, which vary person to person, have been specifically demonstrated to reduce risk of cardiovascular diseases, diabetes, the metabolic syndrome, obesity, and certain types of cancer.

#### Balanced Diet or Right Eating

Balanced diet plays a key role in lifestyle habits and practices that affect virtually every chronic disease. There is strong evidence for a role of nutrition in cardiovascular

disease, diabetes, obesity, and cancer, among many other conditions. Dietary guidelines and consensus statements from a variety of organizations have proclaimed the key role of nutrition, both in the prevention and treatment of chronic disease.

#### Right Body Weight Management or Maintaining the Right Body Mass Index

Obesity is a perennial public health problem in India and other countries throughout the world. In India, the prevalence of overweight (BMI  $\geq$  19-25 kg/m<sup>2</sup>) has been estimated at approximately 70%, while obesity (BMI  $\geq$  30 kg/m<sup>2</sup>) is estimated at 36%, and severe obesity (BMI  $\geq$  35 kg/m<sup>2</sup>) at 16%. These rates are significant and considered fatal, since even small amount of excess body weight will be associated with many chronic diseases including cardiovascular diseases, diabetes, some forms of cancer, muscular skeletal disorders & arthritis etc. [10].

#### Avoiding Alcohol & Tobacco Products

Overwhelming evidence exists from multiple sources that cigarette smoking & alcohol intake significantly increases the risk of multiple chronic diseases including heart disease, stroke, diabetes, and fatal cancer.

#### Working On Stress, Anxiety & Sleep Deprivation

Stress and sleep are interlinked. Stress can adversely affect sleep quality and duration, while insufficient sleep can further increase stress levels. Both stress and disturbed sleep can lead to lasting physical and mental health problems, which can be disastrous for any human being. Good sleep is a topic that is often neglected, but it is a very important aspect of our everyday life. Sleep deprivation affects our quality of life in many ways - be it our efficiency at work, our endurance when it comes to daily tasks, immune system or the prevention of diseases and even our memory, just to name a few. You can try forgiveness, meditation or mindfulness to calm down your turbulent mindset [11].

#### The Time has arrived to Embrace Lifestyle & Preventive Medicine

With the corona pandemic strangulating, finally the time has come to employ the gigantic body of evidence in lifestyle & preventive medicine and encourage positive lifestyle medicine not only for the patients but also in our own healthy lives. If we don't emphasize on lifestyle & preventive medicine, it will pose a significant economic and social burden in India and that will have a huge impact on the health care system, which will hamper the economic development of our nation leading to a stressful situation for

our future generation.

### The Paramount Significance of Lifestyle & Preventive Medicine-Learning from Covid-19 Pandemic

Today the whole world is crushed & dispirited by this COVID-19 pandemic and the key co morbidities for the corona virus are cardio vascular diseases, obesity & diabetes. People with underlying medical conditions such as heart diseases, obesity and diabetes were corona affected and hospitalized needing oxygen, ventilator & ICU support six times as often as otherwise healthy individuals infected with the novel corona virus need. 83% of deaths due to corona virus was caused by comorbid conditions. If the percentage of cardiovascular diseases, obesity & diabetes were less in numbers, then automatically the mortality rate or the death rate caused by covid19 would have been very less. Also evidences suggested that the key ingredients of lifestyle & preventive medicine such as regular moderate scientific exercises & balanced diet (immune enhancing food & supplements) were particularly beneficial for immune enhancement and reducing the risk of infection. Covid-19 pandemic has also tutored the mankind on the importance of a clean and self-disciplined lifestyle [12].

### Conclusion

Lifestyle medicine & prevention policies-not only will protect and prevent us from getting into diseases, but also will play a greater role in the economic development of any nation by reducing the public Health Care expenditure of its government. Ultimately, it will help us fight against any medical emergency situation or a pandemic like COVID-19 effectively leading to slogans..."A healthy citizen will be a productive citizen"... "A healthy nation will be an omnipotent, unconquerable and wealthy nation".

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