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GUEST EDITORIAL:
THE S.E.L.F 4 HEALTH™ MODEL: SHIFTING THE PARADIGM FROM A REACTIVE SICK CARE MODEL TO A PROACTIVE HEALTH CARE MODEL



ZAKIUDDIN AHMED[1], MARIUM SOOMRO[2], SYED HAMZA SOHAIL[3].
[1] Riphah Institute of Healthcare Improvement & Safety, Riphah International University. Islamabad, Pakistan.
[2]Health Research Advisory Board (HealthRAB), Pakistan.
[3] Department of Neurology, Aga Khan University, Karachi, Pakistan.
CORRESPONDENCE: DR. ZAKIUDDIN AHMED EMAIL: zakiuddinahmed@gmail.com

ABSTRACT
Modern healthcare systems largely operate within a reactive "sick care" model focused on diagnosing and treating disease after its onset rather than preventing underlying causes. Although critical for acute management, this approach offers little impact on the worldwide increase in chronic diseases and escalating healthcare expenditure. In contrast, proactive healthcare emphasises prevention, early intervention, and sustainable lifestyle modification. The S.E.L.F 4 Health™ Model presents a holistic, evidence-informed approach based on four pillars: Sleep, Exercise, Lifestyle, and Food. This initiative endeavors to improve physical and mental health, lower the incidence of noncommunicable diseases, and bolster long-term health resilience through modifications in behaviour and environment. Integration of this framework into healthcare systems could foster a shift towards preventative and sustainable healthcare.
KEYWORDS
Chronic Disease; Diet; Exercise; Healthy Lifestyle; Health Promotion; Noncommunicable Diseases; Preventive Health; Sleep Hygiene.

INTRODUCTION

Modern medical systems operate on a 'sick care' model, which is reactive and is activated when patients become ill, mitigating damage by treating diseases and injuries after they occur. The interventions include medications, surgeries and therapies. 'Sick care' is essential for managing acute conditions and emergencies; however, it does not address the underlying causes of disease. Long-term diseases such as depression, diabetes, dementia, Polycystic Ovary Syndrome (PCOS), heart diseases, and nonalcoholic fatty liver disease (NAFLD) and other illnesses are increasingly prevalent nowadays and remain largely unattended, despite advancements in modern medicine, technology and understanding.

The costs of relying heavily on 'sick care' are enormous. The U.S. alone spent $216 billion annually on stroke and heart disease. 'Sick care' demands substantial resources, including highly trained professionals, advanced medical equipment, costly infrastructure, etc.[1] Despite advancements in modern medicine, including new drugs, state-of-the-art hospitals, skilled healthcare professionals and cutting-edge technology, the 'sick care' system consistently falls short in providing a solution to address underlying factors contributing to illness, as chronic diseases remain widespread and uncured,[2] (Table 1).

Table 1

Trends in the Prevalence of Chronic Diseases.[3-8]

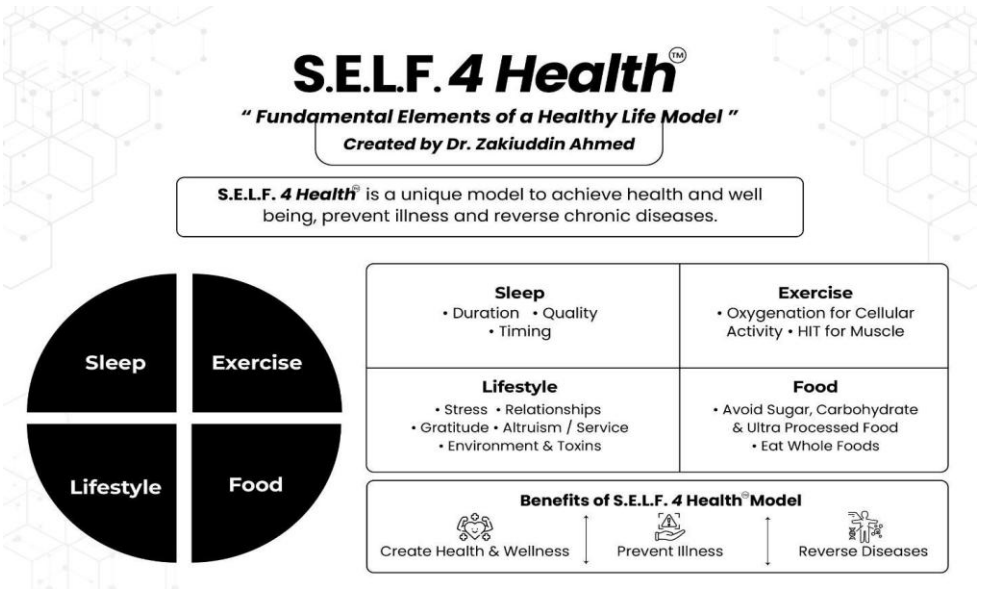
Chronic Diseases	Initial Year		Latest Year		% Increase (from Initial to Latest Year)
	Year	Estimated Prevalence (Millions)	Year	Estimated Prevalence (Millions)	
Depression	**1990**	172	**2017**	258	50%
Alzheimer's	**1990**	20	**2020**	55	175%
Diabetes	**1990**	200	**2022**	830	315%
Dementia	**1990**	4	**2021**	8	100%
NAFLD	**1990**	561	**2019**	1235	120%
PCOS	**1990**	12	**2021**	18	50%

In contrast, healthcare (often referred to as 'well-care') is a proactive approach, aiming to prevent illness and promote overall well-being. It emphasises healthy behaviours like effective physical activity, healthy diets, lifestyle modifications, and restorative sleep. This approach seeks to empower individuals to create good health and also reverse illnesses.

In this context, the author (ZA) developed the S.E.L.F 4 Health™ Model, which is a unique and comprehensive model aimed at promoting health and wellbeing, preventing illnesses, and aiding in the reversal of chronic diseases. It emphasises the following four fundamental pillars (Figure 1):

Figure 1

The S.E.L.F 4 Health™ Model



1. **SLEEP**

Humans require sleep for both their physical and mental health. It is a periodic biological state which is regulated by a homeostatic process. For good health and wellbeing, the role of good sleep is important. While mostly duration of sleep is emphasised, scientific evidence suggests that besides duration, quality and timing are essential elements of healthy sleep.[9] Epidemiological studies have indicated that poor sleep has been associated with a higher risk of memory impairment, poorer cognitive function, anxiety and depression. In addition to this, people suffering from insomnia are 10 to 17 times more likely to experience anxiety and depression compared with those without insomnia. Scientific evidence also suggests that poor sleep is also associated with several other mental problems, including eating disorders, post-traumatic stress, delusions and hallucinations.[10]

Individual sleep requirements vary based on factors such as age, certain health conditions, pregnancy, medications, etc. However, for the average adult, it is recommended by the American Academy of Sleep Medicine (AASM) and the Sleep Research Society (SRS) to have 7 or more hours of sleep each night for good health and wellbeing. The National Sleep Foundation recommends 7 to 9 hours for adults and 7 to 8 hours for older adults.[9]

2. **EXERCISE**

Physical activity, such as exercise, plays a fundamental role in preventing chronic diseases such as obesity, cancer, depression, diabetes, hypertension, and heart diseases. Brisk walking improves mental health along with cardiovascular health, strengthens core muscles, and enhances balance. High-Intensity Interval Training (HIIT) builds muscle mass, which in turn supports better posture and stability, ultimately contributing to the ability to stand and move with confidence. Both these physical activities also burn calories and improve metabolism, contributing to overall health and wellbeing.

The WHO has recently updated its Physical Activity and Sedentary Behaviour Guidelines, which recommend performing approximately 150 to 300 minutes of moderate-intensity exercise or 70 to 150 minutes of HIIT weekly to attain significant health benefits. Scientific evidence has shown that people who meet these weekly targets have a lower risk of depression compared to inactive individuals. Physical activity that is below the recommended duration has been shown to reduce the risk of depression and positively impact mental wellbeing as well. Compared with inactive adults, individuals who perform half of the recommended amount of exercise have an 18% lower risk of depression[11]. In addition, regular physical activity lowers the risk of dementia by 28% and Alzheimer's disease by 45%.[12]

3. **LIFESTYLE**

Environmental and behavioural factors have an impact on lifestyle, and both play a crucial role in health. Behavioural factors such as altruism, benevolence, and healthy relationships are particularly important for mental and physical well-being.[13] Altruistic emotions and behaviours, benevolence and positive relationships are strongly linked to increased well-being, happiness and longevity. These factors enhance both mental health by reducing anxiety and depression and physical health through stress reduction and protection against premature ageing.[13] Similarly, when a body experiences continuous stress, it produces cortisol, leading to episodes of high blood pressure, anxiety, depression and uncontrolled diabetes.

Environmental factors and external toxins play a significant role in increasing the prevalence of chronic

diseases. Environmental risk factors, including physical, chemical, biological and lifestyle/work-related elements, according to WHO, account for 23% of deaths, with 2/3 of these being attributed to non-communicable diseases (NCDs). Workers in industries such as construction, manufacturing, and agriculture may encounter hazardous substances like asbestos, lead, mercury and pesticides. For instance, asbestos exposure is associated with lung cancer and asbestosis, while lead exposure can lead to neurological impairments such as schizophrenia and depression. Prolonged exposure to physical agents like noise, vibration and radiation can contribute to cardiovascular diseases (CVD).[14]
On the other hand, plastics, particularly in utensils and food containers, can leach toxic flame retardants (e.g., decaBDE), phthalates and Bisphenol A (BPA) that are linked to hormone disruption, developmental and reproductive problems, asthma and various cancers. Moreover, microplastics can also cause DNA damage, oxidative stress and inflammation, increasing the risk of heart attacks, strokes and autoimmune disorders. Commonly used household items such as perfumed aerosols and scented candles release volatile organic compounds, while personal grooming products like cosmetics contain harmful chemicals.

4. **FOOD**

The S.E.L.F. 4 Health™ Model's central pillar is food, which acts as a double-edged sword. Food can be both medicine and poison. It plays a crucial role in preventing, treating and even reversing many chronic diseases like cardiovascular diseases (CVDs), depression, diabetes and Alzheimer's. Large amounts of highly processed dietary sugars create sugar spikes in the blood, leading to brain fog.
A poor diet, characterised by an abundance of dietary sugar (especially fructose) and ultra-processed foods (UPFs), is now considered a primary contributor to morbidity and mortality across the globe. Excessive intake of fructose has been linked to chronic diseases like NAFLD through multiple biological pathways. Consumption of fructose in higher quantities can cause mitochondrial dysfunction, oxidative stress, and neuroinflammation, which alter brain function and lead to mood disorders, including depression. It also alters metabolic functions like insulin sensitivity, leading to diabetes and PCOS. Similarly, UPFs contain refined carbohydrates, high fructose content, unhealthy fats and artificial additives. These foods cause imbalances in the gut microbiome, which is an important component of the brain-gut axis that affects cognitive function and mood. UPFs are also associated with a higher risk of NCDs, as they promote oxidative stress and inflammation.
Protecting individuals from harmful foods requires informed choices and a commitment to nourishment through balanced nutrition. A healthy diet should include polyphenol-rich foods such as blueberries, strawberries, almonds, walnuts and olives; unrefined carbohydrates including whole grains, legumes, fruits and vegetables; and DHA/omega-3 fatty acids, which are found in salmon, tuna and other fish.[15]
The most beneficial foods for optimal brain health include berries, especially blueberries; nuts, particularly walnuts; and omega-3 fatty acids. Whole foods rich in fibre promote gut health, which enriches the gut microbiomes, leading to improved health on both cellular and functional levels.

CONCLUSION

The S.E.L.F. 4 Health™ Model is a transformative framework that offers a preventive, lifestyle-centred strategy that addresses both physical and mental determinants of health. By prioritising modifiable behavioural factors, it complements conventional medical care and supports sustainable health systems. In the context of rising global noncommunicable diseases, a shift from reactive treatment

toward proactive health promotion is both necessary and timely. Embedding such models within clinical practice, public health policy, and community engagement initiatives may strengthen population resilience, enhance quality of life, and improve long-term health system sustainability. The future of global healthcare depends not only on treating illness but on systematically cultivating health.

CONFLICT OF INTEREST

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