

GANDHIAN PRINCIPLES ON HEALTH: EVIDENCES, RELEVANCE AND IMPLICATIONS IN THE MODERN CONTEXT OF HEALTH

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Mohan Das Karamchand Gandhi, popularly known as Mahatma Gandhi is one of the greatest visionaries who is known for his anti-imperialistic views and strong political strategies. Right from his childhood till his last breath, he had a keen interest in practising medicine. In spite of the odds going against him to pursue a formal medical degree, he practiced medicine throughout his life. He recommended and followed strict principles on health that have valid scientific coherence. The objective of this article is to describe his principles on health and analyse it in the light of scientific literature. The vocational medical practice formed a major part of his activities in parallel to his political reforms. His service at Sevagram and his role in the lives of many sick are quite evident. Gandhi believed in the power of will and hence emphasised on psychological support and reformation as the foremost principle. He followed and recommended natural therapy like- mud cures, fasting and Citrus diet. Throughout his life, he strongly emphasised strict palatal control and regular physical exercises which would address the vast magnitude of non-communicable diseases today. He believed fasting not only as a political strategy but also as a therapy for many illnesses. He also recommended occasional fasting for healthy individuals. He followed chastity and believed it to be an important factor for physical and mental well-being. His views on euthanasia are controversial. Following Gandhian health principles will build a healthy human and thence a healthy nation.

Keywords: Gandhian views; Natural cure; Palatal control; Fasting; Vegetarianism; Euthanasia.

Introduction

Mahatma Gandhi is known across the world for his historic political reforms in liberating nations

from colonial rule. His policies of anti-imperialism, nonviolence, Swadeshi movement, Boycott movement and Satyagraha are being considered today to be strong political strategies. He is looked upon as one of the greatest visionaries ever lived. Having been viewed across the world as a leading political leader, his principles on health are least explored. Recent scientific evidences and views of the modern health experts are in acceptance with that of Gandhian views. Gandhi believed and professed that prevention is better than cure. Majority of his principles such as personal hygiene, palatal self control, vegetarianism, and regular physical activity were based on prevention of illnesses. This article will explore Gandhi's interest in health, nutrition, therapy and healthcare and correlate the same with recent evidences.

Medicine as career: Yearning and the obstacle: In his childhood Gandhi was a common boy, shy, timid and self-conscious without any extraordinary capabilities [1]. From his childhood, Gandhi had an inclination towards medical profession and always wanted to be a doctor. In 1888, as an eighteen year old young man, Gandhi longed to sail to England to earn his medical degree. The odds were against him. He faced opposition from his mother and his elder brother. Having been born in a Vaishnava family, it was against their custom to travel overseas and to dissect human bodies which was and is still an integral part of medical curriculum. His family and friends also reminded him about his succession to his father's position as a Diwan and the need for economic security. Hence, they insisted him to undergo training in law and to become a barrister.

Inclination towards medical profession :Gandhi went on to proceed his studies in law. According to the writings of Frederick B. Meyer in his book, *A winter in South Africa*, even after twenty years (i.e. in 1908), Gandhi was not contended with his profession as a barrister and hence wished to study medicine [2]. It is obvious that his sole motive was to serve humanity. Gandhi wrote, "My creed is service of God and therefore, of humanity". So it can be assumed that Gandhi contemplated the difference in service to humanity as a doctor vs a barrister. While he was in the process of preparation to pursue medical education, he confronts a doctor who negatively influenced his desire to pursue medicine. In 1909, Gandhi wrote to one of his friends in which he expresses his disinterest towards medical education and that he considers it a sin to kill and dissect animal. After sixteen years, he fancied his contributions to the society should he have chosen medical profession [3]. He abhorred treating infections like venereal diseases and tuberculosis. In the present context, denying treatment to such patients will be a violation of basic ethics of medical practice and Declaration of Geneva. However, throughout his life he exhibited abiding concern towards the sick and healing.

Vocational medical practice and healing :Gandhi qualified himself in jurisprudence. In spite of his professional practice as a barrister, he possessed an inclination to serve the community through healthcare. His life is occupied with quiet a lot of incidents which make his interest in the art healing pretty obvious. His disciples and followers directly witnessed his passion for nursing and caring for the sick. The best illustration would be his service in Sevagram. Sevagram is an ashram in Maharashtra which was instituted by Gandhi in 1936. Initially, Gandhi intended to make a personal residence in a village named Segaon which was later renamed as Sevagram. Owing to the gravitation of people from far as wide who solicited Gandhi's presence, he established an ashram. This ashram was the centre of activity of Gandhi in the last decade of his life. It was a point for summits, and formulation and integration of political policies in the Indian freedom movement but also a haven for many sick. In his routine schedule, most of the time was spent on caring for the unwell and self health fortification. His care for a Sanskrit scholar who was a leper is evident. People also went in search of Gandhi for their personal and health decisions. Sevagram had a hut in which people visited Gandhi and a small dispensary was also situated just adjacent to it. He usually prescribed fasting either complete or partial. Majority of the people were treated with drugs like sodium bicarbonate, castor oil, quinine and iodine which were issued at the dispensary. After the arrival of Dr. Sushila Nayar, the volume of patients further expanded. Most of his time in a day was spent for the care of sick and for providing health services to the visitors. His aptitude for self-therapy and efforts to treat his terminally ill wife are the finest illustrations of his vocation to practice medicine.

In December 1908, during their stay in South Africa, Kasturba Gandhi was diagnosed to have Pernicious anaemia and was in a state of critical illness which required intensive therapeutic care. She was treated by an English physician with meat extracts to replenish Vitamin B12 stores. This news about his sick wife was taken to Gandhi who was then at Johannesburg. The next morning, returning to Durban, Gandhi reassured his wife, stopped all treatments and started her with only fresh lemon juice at specific intervals. Gradually, Kasturba improved within a fortnight without any relapse. Citrus fruits are rich in Vitamin C and not Vitamin B12. By no chance can Pernicious anaemia improve with Vitamin C supplementation. Few experts suggest a psychosomatic phenomenon as the cause of Kasturba Gandhi's drastic improvement [4]. Recent evidences have established Vitamin C deficiency as a cause of nutritional anaemia. Hence, it can be assumed that Kasturba Gandhi suffered an acute crisis of scurvy. However, other evidences suggestive of scurvy have not been documented.

Emphasis on psycho-somatic reinforcement and mental health: Gandhi believed in the will of the mind to be responsible for any condition of the human body. His mere presence strengthened his followers psychologically which manifested as physical endurance and courage. Evidences describe the method Gandhi adopted to treat a patient with Rheumatoid arthritis since childhood, with just massage and restricting Citrus diet [5]. No scientific phenomenon will serve as an explanation. This patient was suffering from Rheumatoid arthritis since childhood which indicates chronicity. It is well established that chronicity results in cortical pain which can be attenuated through psycho-somatic remodelling. The intimacy and intense care provided by Gandhi himself served as a positive reinforcement and triggered psycho-somatic rewiring that indeed could have resulted in pain-relief.

In 1927, Gandhi's English political friend Fenner Brockway was hospitalised in a hospital at Chennai following a road traffic accident. That was a time when the broad spectrum of analgesics hadn't yet evolved. He was in much pain. Gandhi visited him on a Monday, a day which Gandhi considers to be a day of silent fast. Since he cannot talk, he just took Brockway's hand on his hand to comfort him. Later Brockway recollected that Gandhi's act of holding his hand produced strong analgesia and enabled a painless sleep without any medications [6]. Gandhi believed in the power of touch. A recent study (2018) published in PNAS journal demonstrated an enhanced brain-brain coupling interaction while holding hands in pain which results in analgesia [7]. His principles like nonviolence and satyagraha ensure mutual understanding, cooperation, forgiveness and forbearance which will all together frame a healthy environment for mental wellbeing.

Nature cure and self-therapy: Gandhi relied on nature cure remedies and was focussed on reviving the knowledge of people regarding nature cures. He was inspired to adopt naturopathic healing from the works of two German physicians- Louis Khune and Adolf Just who followed natural remedies and mud cures. He formulated his own principles and methods of nature cures. For lassitude and fatigue he would administer rice water mixed with jaggery while for diarrhea he would stop all oral feeds and put the patient on boiled water. He himself adopted nature and mud cures. Most of the time when he gave interviews, he would lie back on his cot with a mud poultice over his abdomen to lower the blood pressure and a mud bandage around his head during summers to reduce body heat [8].

On 10 February 1908, Gandhi was assaulted by some Indians who objected his comprise with General Smuts. He sustained deep lacerations over his face for which wound was cleaned and regular dressings were done but still it was taking quit longer time to heal. So Gandhi applied a plaster of mud over his wounds which made the treating doctor furious. But the wound healed within another two days [9]. But the probable scientific rationale can be the principle of probiotic therapy or that mud might contain a chemical compound that might fasten wound healing. However, the factor of sterility and the effect of contamination in soil have to be addressed. It can be assumed that Gandhi was resistant to the contaminants in the soil due to repeated exposure.

Palatal control and vegetarianism: Gandhi was against over eating. He described overeating as

an universal crime; it is a crime against the society and sin against human body. This principle is in agreement with the recommendations of modern health experts. Gandhi professed naturopathic dietary practices. He believed that the nature has provided fruits, vegetables and other products in its own taste. Man tries to modify the taste of these condiments through artificial means like making sugar out of sugarcane, chocolates, juices etc. These modifications suit human desire and palatability which favour over consumption and associated sicknesses. He considered food to be an essential factor for survival and not for taste and luxury. Control over food and taste would be the first step in achieving self control over senses and desires. He also experimented nutraceuticals through which he concluded food as medicine for a variety of illnesses such as digestive disorders, respiratory diseases and rheumatism.

According to customs and traditions, Gandhi was not supposed to consume carnivorous diet. When Gandhi was 13 years old, he was influenced by his Muslim friend that consuming meat would improve physical health, consenting to which Gandhi consumed meat. Rest of the childhood he consumed only vegetarian diet as measure of repentance for his act of deception. But his admiration for vegetarianism developed when he read a book named, 'A plea for vegetarianism' by Henry Salt. He then carried out an extensive literature research on the benefits of vegetarianism by reading various other books such as 'The Treatise Advocating to the natural and ancient food of our race' by Anna Kingsford, 'Foods Man and Vegetable: A Comparison' by Benjamin Ward Richardson, and 'Why am I a vegetarian?' by John Eyton Bickersteth Mayor. These books made a life long impact on Gandhi's way of living. Throughout his life he professed naturopathic nutrition and vegetarianism. He was also an active member of London Vegetarian Society. A cross sectional study carried out by Rizzo SN et al [10] in 2013 showed a vast difference in nutritional proportion between vegetarians and non vegetarians. They also recorded high BMI and deficiency of a few essential micronutrients such as carotenoids and magnesium among non vegetarians.

Physical activity and hygiene: Gandhi attributed his good health to physical activity and vegetarianism. When Gandhi was in London, he used to walk for almost 8 miles a day [11]. He took three walks a day each lasting 45 minutes to 1 hour. He realised that physical exercise is required for both mind and body. He emphasised everyone to practice some form of physical exercise- home making, gardening, walking, farming and sweeping of which farming was given the highest priority. Physical activity improves the efficiency of cardio-respiratory functioning and ensures optimal utilisation of muscles and joints. He also recorded that adequate physical activity will also enhance the intellectual ability of a person [12].

Gandhi emphasized hygiene and sanitation at all circumstances. In 1907, in South Africa, Indians were considered dirty because of their unhygienic practices and because their homes surrounded by heaps of slush and refuse. Hence, Gandhi himself framed a list of do's and don'ts which he urged the Indians to follow. In 1908, even during his first imprisonment Gandhi expressed his concern about clean latrines and bathrooms in prison. He was also worried about contracting scabies for which he wanted his moustache shaved. Visva-Bharathi university commemorates Sanitation day on 10 March, the same day in 1915 when Gandhi visited the university and emphasized on maintaining a clean and hygienic environment. He meticulously made all possible efforts to ensure hygiene.

Fasting as a non-political health strategy : Fasting was not only one of Gandhi's political strategies but also a health reform. He recommended fasting to be a therapeutic intervention like fever, depression, constipation, diarrhea, rheumatism, anemia and gout. He also recommended occasional fasts even for the healthy to preserve good health. Recent scientific evidences suggest that occasional fasts boost cellular repair and regeneration that can prevent diseases like cancer [13]. Fasting is defined as the "ability to meet the body's requirements for macro- and micronutrients during a limited period of either shortage or absence of food, by using almost exclusively the body's energy reserves without endangering health" [14]. The same article describes fasting to be an act of voluntary withdrawal from solid food and stimulants like nicotine and alcohol for a certain duration of time. During a fast, the calorie intake should not exceed

beyond 500 kcal/day which should be consumed only in the form of juice or broth. Typically one should not feel hungry while on a fast since the body should be able to meet its caloric needs. However, Gandhi's fast lacked such specifications.

The vow of chastity: Though Gandhi was married, he vowed chastity in 1906. Having been married and consummated at the age of 12, Gandhi developed a feel of yearning for his wife and the act of sex. Admits that even at school he used to think of his wife and eagerly wait for the nightfall when they would get together [15]. Lust was the reason for his absence at the time of his father's death. Later, Gandhi attained deeper understanding on morality of sex and made the vow of chastity in 1906. Gandhi felt that the quality of their marriage improved following his vow. He wrote, "The moment I bade good-bye to a life of carnal pleasure our whole relationship became spiritual. Lust died and love reigned instead." [15] Chastity and celibacy do not only refer to physical restraint but also restraint of thought and sensory perception. Chastity enables one to differentiate animal desires from human purpose. Such command over the senses, sensory perceptions, motor activities and thought conception is a chief requisite for psychological and spiritual well being. It therefore reduces the incidence of sexually transmitted infections, domestic violence, depression, stress and social immorality.

Palliative care and euthanasia: Gandhi recommended palliative care for a terminally ill person instead of intensive treatment. This was demonstrated through his decision in case of his wife dying of pneumonia. Once at Gandhi's ashram a calf fell sick. In spite of treatment it was going from bad to worse. None could witness the intolerable agony of the poor creature. Gandhi then approved the injection of a poison that would put an end to its agony. Gandhi was once questioned whether the same is applicable on humans for which his reply was "Yes"! [16]. Gandhi's approval for the use of euthanasia caused tremendous furore throughout the nation. Gandhi described euthanasia as the 'most solemn service' to a fellow being. However, the current perspective on euthanasia is controversial.

Conclusion

When Gandhi was once asked for an overall message to the world. "My life is my message", he replied. Gandhi's life has hidden within itself numerous principles on health that are least explored. Though Gandhi was a barrister by profession, he practiced jurisprudence for hardly 20 years but practiced the vocation of medicine throughout his life. Most of the Gandhian principles are in close agreement with that of the recent scientific evidences in promoting physical and mental health. Hence, active propagation of these principles and principle-directed restructuring of lifestyle will be truly beneficial. Healthcare professionals should make every effort to promote these principles by professing and by practising. However, a few of his principles call for individual rationalisation and adoption.

References

1. Easwaran E. Gandhi the man: How one man changed himself to change the world. The Transformation. Twelfth edition. Jaico Publishing House. 2011; 25-51.
2. Ramachandra. Gandhi. PenguinHouse. 2013; 74.
3. The collected works of Mahatma Gandhi. Publications division, ministry of information and broadcasting, Govt. Of India. 1958-94; reissued digitally in 2015; xxvi: 299-300.
4. Polak MG. Mr. Gandhi the man. London. 1931; republished in Bombay in 1949; 105-17.
5. Patel RM. Gandhi-ni-Sadhana (Gujarati). Abid Shaman. The making of Mahatma Gandhi (English adaptation). Ravindranath Patel, Ahmedabad. 1990. Part 2; Chapter 9. (www.gandhiheritageportal.org/es/search-result/makingthe), accessed on 07/08/2018.
6. Kalalar K. Stray glimpses of Bapu. Navajivan, Ahmedabad. 1950; 62.
7. Goldstein P. Brain-brain coupling during hand holding is associated with analgesia. Proc Natl Acad Sci USA. 2018; 115: 2528-37.
8. Desai M. How does Gandhiji live?, Gandhiji as we know him: by seventeen contributors.



- Bombay. 1945:119-39.
9. Doke MC. Recollections of Mahatma Gandhi, Gandhi in anecdotes. Navajivan, Ahmedabad. 2001: 97-98.
 10. Rizzo SN. Nutrient profiles of vegetarian and non vegetarian dietary patterns. J Acad Nutr Diet. 2013; 113: 1610-19.
 11. The collected works of Mahatma Gandhi. Publications division, ministry of information and broadcasting, Govt. Of India. 1958-94; reissued digitally in 2015; i: 120.
 12. The collected works of Mahatma Gandhi. Publications division, ministry of information and broadcasting, Govt. Of India. 1958-94; reissued digitally in 2015; xxxvi: 437.
 13. Dockrill P. Fasting for just 24 hours boosts the regeneration of stem cells, study finds. (<https://www.sciencealert.com/fasting-for-just-24-hours-boosts-the-regeneration-of-stem-cells-study-finds-intestine-longevity>). Accessed on 10/08/2018.
 14. Boschmann M. Fasting therapy- Old and new perspectives. Forsch Komplementmed. 2013;20:410-11.
 15. Gandhi KM. The Story of my experiments with truth. Ahmedabad. 1929. Part 1.
 16. Kalalar K. Stray glimpses of Bapu. Navajivan, Ahmedabad. 1950; 77-78.