

# Gandhi on Health

Mark Lindley

**Gandhi Research Foundation**  
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*(Mark Lindley, born in Washington DC in 1937, is a distinguished ecological economist (formerly the University Chair Professor in the School of Economics at the University of Hyderabad), Gandhi scholar, and student of the history and theory of Western classical music. He has written or co-authored more than a dozen scholarly books – three of them about Gandhi and notable Gandhians – and more than 100 scholarly articles.*

*As a visiting Research Fellow at the Gandhi Research Foundation he has written an essay entitled “Gandhi on Health”, describing what Gandhiji said and did in regard to health, nutrition, hygiene and health care – all four together in one text.)*

“Anyone who observes the rules of health will not need to knock at the doors of doctors from day to day.”

Gandhi was the nonviolent political mover and shaker who took the greatest colony away from the greatest empire in history (thus playing a role, in the history of anti-imperialism, analogous to the roles of Bolivar in South America, Atatürk in Turkey, Mao in China and Sukarno in Indonesia). He did it in such a way as to ensure that in the Republic of India there would be a relatively free press, relatively free elections, a functioning distinction between the executive, legislative and judicial branches of government, and some other important features of the British political system.

He was, however, more than just a leading anti-imperialist and the main founding father of the largest parliamentary democracy. Everyone knows, for instance, that his method of political struggle was a fabulous contribution to the history of political techniques.

This essay will show that his interest in health, hygiene, nutrition and health-care was just as great as his interest in politics.

Some of his concerns in regard to health and health-care harmonize with expert 21st-century medical views. He insisted that avoiding disease is a lot better than getting and curing it, and so it's important to be clean, control your diet, get substantial daily exercise (he took seriously the fact that the natural function of our arms and legs is to perform physical work\*) and not take more medicines than you really need. It is a vital message for affluent people today.

According to legend, toward the end of his life he said, when asked for an overall "message" to the world, "My life is my message." This health-related aspect of it has been relatively ignored.

\*The amount of physical work done is expressed in the equation:  
work done = force times distance.

This essay will describe:

- The two pivotal times in his life, in 1888 and in 1908-09, when he wanted to earn an M.D. degree and become a professional doctor.
- Evidence that after finally deciding not to do it, he nonetheless administered medical treatments during the rest of his life.
- Some examples of remarkably successful healings by him.
- His sharp critique –written in 1909– of professional medical practice.
- Evidence of an incipient (though shallow) interest nevertheless in modern Western chemistry.
- Some examples of his uses of the words “quackery” and “quack”.
- Some Western-type doctors whose medical expertise he esteemed.
- His precepts as to the knowledge and skills which military first-aid providers need to have. (He had led an ambulance corps.)
- His appreciation of healthy physical work.
- His vegetarianism.

- His critique of medical methods cruel to animals or otherwise contrary (in his opinion) to the spirit of vegetarianism.
- His book, *Key to Health*.
- His practice of “Nature Cure” featuring hydrotherapy and mud-cures, and his admiration for books by Louis Kuhne and Adolf Just.
- His use of fasting as a method of health care.
- His belated recognition that overwork and getting too little sleep can be unhealthy.
- His clear focus on hygiene.
- His teaching that chastity is essential to good health.
- Some examples of how he would sometimes set aside his own dogmatic inclinations.
- His approval and use of euthanasia.
- His choice of palliative care (instead of aggressive intervention) when his wife was dying.
- His view – relevant to the issue of government-subsidized health care – of rights and *corresponding duties*.

## Gandhi yearning to be a medical practitioner

When he was 18 years old (in 1888) the idea that he study in England was mooted, and his own proposal was to study medicine there. The idea was scotched by his elder brother's objection that their father, who been a *diwan* (chief minister of a princely state) and had died two years before, would have disapproved because "we Vaishnavas should have nothing to do with dissection of dead bodies", and by the advice of a friend of the family that "A medical degree will not make a *diwan* of you. It would be economically wiser to become a barrister" (a law-yer qualified to prepare cases). So he studied law instead of medicine.

Twenty years later, a friend of his mentioned (in a letter to a doctor) that “probably Mr Gandhi, who is a barrister-at-law, plans to go with me [to England] in order to study medicine in London....” Corroboration of the fact is in a British book published in 1908 and entitled *A Winter in South Africa*: “He practices as a barrister but, not content with one profession, is hoping to visit London again shortly, to study medicine, and give his sons wider opportunities for realizing the ideal with which he has inspired them.”

Students of Gandhi’s life know that a basic ideal with which he wished to inspire himself and his sons was that of rendering service. So, he must have felt in 1908 that he could serve people better by practicing medicine than by practicing law.



This time the proposal to study medicine professionally lasted for about a year. During his visit to London in 1909, he wrote to a friend that a certain doctor there

“...tells me that in the course of his studies he must have killed about fifty frogs. An examination in physiology without this, he tells me, is not possible. If this is so, I have absolutely no desire to go in for medical studies. I would neither kill a frog, nor use one for dissecting if it has been specially killed [by someone else] for the purpose of dissection.”

He now felt that he had been “entirely off the track when I considered that I should receive a medical training. It would be sinful for me in any way whatsoever to take part in the abominations that go on in the hospitals. If there were no hospitals for venereal diseases, or even for consumptives, we should have less consumption, and less sexual vice amongst us.”

Sixteen years later, he recalled:

“I nearly went in for medicine. I feel that I could have rendered a great deal of service in that department. But when I understood from a medical friend – and he was a distinguished doctor – that I would have to practice vivisection, I recoiled in horror from it.”

If he *had* become a professional doctor and if he had, as such, categorically denied treatment to patients suffering from tuberculosis or a venereal disease, his behavior would have been so clearly contrary to a basic ethical norm of the profession (then and still today – as illustrated for instance by the following sentence in the World Medical Association’s *Declaration of Geneva*: “The health of my [individual] patient will be my first consideration”) that he would presumably have been barred from continuing his professional practice. It was probably for the best that he stayed with politics.

However, the extent to which healing the sick was an abiding concern of his is shown in the following excerpts from an article written in 1940 by his secretary. (This text shows also that he applied to himself an unorthodox treatment for hypertension.)

“Nursing those who are ailing mentally and physically has been a passion with him throughout his life. Though he chose public law as his profession and then public life has claimed the bulk of his time, the passion [for caring for ailing individuals] has remained and developed from what it once was – a hobby – to a sort of spiritual need.

“When we are away from headquarters, the letters to be placed on the top of his day’s post must be from these [individuals]. His most concentrated work, his most important talk or interview may be interrupted by anyone seeking his advice about the diet, [curative] bath and treatment of these patients.

“Whatever the number of visitors [to him when he is not traveling] and whatever the time, the little hut [i.e. his own mud hut] remains the scene of Gandhiji’s\* activities. Instructions [from him] regarding the diet of the patients are final, in spite of their general treatment being in charge of Dr Sushila Nayyar. The patients have their [morning] meals served before Gandhiji, who looks into every little detail.

\*The suffix “-ji” is honorific, equivalent to “Mr.”

“Within an hour after this, the hut becomes [his] office with the day’s post and newspapers, and after he has heard the main items or cast his eye over the post, it [the hut] becomes his siesta-room. Then, writing or the giving of interviews begins, sometimes these taking place as he is lying on his back with a mud poultice on his abdomen. This is part of his permanent treatment for blood-pressure – not prescribed by any doctors but himself. In the hot season a mud bandage on the head is an additional item, and to wondering visitors he often delights in describing the wonderful properties of mother earth. Then comes spinning, almost always accompanied by the giving of interviews.

“At five o’clock goes the bell for the final meal of the day, and the patients foregather in the hut, which has again become the dining room.

“Morning [before dawn] and evening constitutionals are as much a part of Gandhiji’s regular routine as prayers. Plenty of business is transacted during these walks.

“Sevagram was originally intended to be a solitary home; Gandhiji did not want anyone to accompany him. But workers from far and near began to gravitate here, and he had not the heart to say ‘no’.

“He had had no idea whatsoever of having a dispensary on the premises. He himself in the early days used to prescribe fasting or semi-fasting. Castor oil, sodium bicarbonate, quinine and iodine were the only drugs he used for those who came with their troubles. But the number [of people at Sevagram] began to grow larger every day, and with the coming of a doctor [i.e. Sushila Nayar] we had a little bit of a dispensary. We have now a fair-sized dispensary, and we may soon have to have a hospital.

“Among the patients is a leper. He was a political jail-bird with us in Yeravda [in the 1920s] and got leprosy there, or had it diagnosed there, I forget which. He is a profound Sanskrit scholar. After having wandered for years as a castaway, he rolled in here one fine morning, saying he wanted to lay his bones here. ‘How can I say no to you?’,

said Gandhiji. ‘If I harbour a son-in-law suffering from tuberculosis, why should I not harbour you? Who will look after you if I don’t? I shall build you a hut right near my hut, and you make the place your abode. Even if no one [else] remains here [with us], you at least shall stay.’”



*Gandhi nursing the resident leper*

In other accounts of Gandhi and in his *Collected Works*, there is plenty of evidence that **his vocation to be a medical healer was deeper than his vocation to practice law**. (I put this in red font because it is the first of the three main findings of my study.) It was for the sake of financial security that he had in his youth gone to London and diligently studied jurisprudence. He practiced law for about 20 years and then quit forever (though vigorously engaged in politics); his medical healing of sick individuals continued throughout the rest of his life.



## **Some examples of cures achieved by Gandhi**

While there are no data as to how successful most of the treatments he administered were, it is clear that he did sometimes have such remarkable success as to be confident that his ideas were valid.

Here are some cases in point:

- “Mr C----- had been under medical treatment on and off for some months, and at last the doctors had ordered an immediate operation for appendicitis, much to the concern of our friends, the D-----s. Mr D----- came to Mr Gandhi and talked the matter over with him. The result was that Mr D----- went straight from Mr Gandhi at eleven o’clock at night to the lodgings of his friend, and carried him on his back to his own house (a distance of about a mile). There Mr C----- was put to bed, douched, made to fast, and nursed largely according to Mr Gandhi’s directions, and he made a speedy recovery from the acute attack. As soon as Mr Gandhi thought him fit, the patient was put on a light, non-flesh diet, and his strength was gradually built up. I knew of him for many years after that, but he stuck to the diet and internal cleanliness and never once had a relapse or a recurrence of the trouble that had made him so ill for months.”

(It seems evident that the doctors’ diagnosis was incorrect and that Gandhi guessed this from the information given to him.)

- When Gandhi was assaulted and battered on 10th February 1908 (by some Indians who felt that he had compromised too much in a political settlement reached on 30th January with General Smuts), he was cared for in the home of a friend whose son recalled, years later:

“I can see Mr Gandhi, now, propped up with pillows, his lacerated face swathed with bandages, unable to speak, and writing answers to questions on a slate before him.

“The healing of the wounds was slow, and he got impatient. He told my father that if he could get a plaster of ‘clean mud’ on his face, he was sure it would help. So off I was sent with spade and bucket to clean away the topsoil and get uncontaminated lower earth for the plaster. We made the mud plasters, and my mother applied them. Well do we remember the consternation of the doctor when he found out what had been done. He threatened to wipe his hands of responsibility for his patient. But in two days Mr Gandhi was sitting out on the verandah, in the study arm-chair, and eating fruit.”

(Modern doctors would consider it quite risky to put such mud on an open sore. A lot would depend on exactly what mud is chosen (perhaps it could indeed contain a chemical of therapeutic value), on whether it has been sterilized, irradiated, analyzed chemically for toxins, etc. (which in this case was not done), and on the extent to which the patient might have developed, after exposures to similar stuff, immunity to potentially harmful organisms and/or viruses in it. I imagine that Gandhi had indeed developed such immunity.)

While this last example was about Gandhi speeding up a cure, the next one is more typical in the sense that it is about his arranging for the patient to recover more slowly than the doctor had planned and failed to achieve.

- “The most remarkable cure [by Gandhi] that I knew of, from the commencement of the Indian trouble [in Africa] to the end, concerned Mrs Gandhi. She was about forty at that time [December 1908], and had been ailing for a long while. She had consulted a doctor, who treated her, but she grew worse, and eventually her condition, which had become serious, was diagnosed as pernicious anaemia. She was then living in Phoenix, Mr Gandhi was in Johannesburg, and my husband and I were living in Durban. A night arrived when a hasty messenger came from Phoenix for us and the doctor. We got the last train to Phoenix. “We found her in a state of collapse. Mr Gandhi arrived the next day, and in the meantime Mrs Gandhi had rallied slightly. **No possible hope, however, was given of her recovery,** and at the most only a week or two of life could be looked for.

“Mr Gandhi put everything on one side and devoted everything to her. During one of her conscious periods he asked her if she trusted him absolutely. She replied in the affirmative. Then he said, ‘Will you let me try and help you?’. This she agreed to, placing herself entirely in his

hands. After this he stopped all medicines and refused to allow the doctor to try and force his patient to take meat extracts. The doctor abused Mr Gandhi, who, however, stood firm.

“For the next two weeks Mr Gandhi scarcely left his wife’s side. He fed her at intervals with pure lemon juice, and no other food or drink of any kind was given to her. He poured his calm energy into her, and did for her all the little delicate duties that a very sick woman required.

“For these two weeks, Mrs Gandhi semi-consciously struggled for life, but by the end of that time a marked change was noticeable. The conscious periods were much longer, sleep became more natural, the dropsical swellings became less, and the eyes began to look clearer. Then by slow degrees, a little fruit and milk were given, and lastly vegetables without condiments, and cereals. And without a single relapse, **Mrs Gandhi slowly but surely returned to health.**”

Here again, the professional doctor’s diagnosis seems to have been incorrect. Such was often the case a century ago with alleged cases of pernicious anaemia. That diagnosis is nowadays made only when the cause is ascertained to be a Vitamin-B-12 deficiency due to lack of a

certain protein which is needed in order for the body to absorb ingested B-12 properly and which is normally secreted by the stomach lining. B-12 deficiency can have other causes. In affluent countries today it is sometimes due to poorly planned vegan diets; such a B-12 deficiency would not be correctly diagnosed as pernicious anaemia. The cures for the two kinds of B-12 problem would differ. Adequate doses of citrus juice would cure scurvy, but not pernicious anaemia.

One reason for Gandhi's success in this case may well have been Kasturba's "absolute" trust. He could rally her potential of psychosomatic resilience better than the doctor could.

- Likewise unconnected to the Louis-Pasteur-Robert-Koch-*et-al.* tradition of applying medicines to zap unhealthy germs etc. – and therefore also perhaps largely a matter of rallying the patient’s psychosomatic resilience – was Gandhi’s cure, in 1912, of Raojibhai Manibhai Patel’s rheumatism. The following is an abridged and edited version of a translation of Patel’s account (which was written originally – some 20 years after the cure – in Gujarati):



**“I was rheumatic since childhood.** The doctors had tried numerous treatments but the symptoms kept erupting. When I joined Phoenix Ashram in 1912, Gandhiji was permanently living there. The first thing that happened on my joining Phoenix was a drastic change in my food habits. Earlier I had eaten impulsively. No one [had] ever thought of restraint. Large doses of oral medication [had] suppressed the superficial pain. But [now] I gradually stopped eating food-grains, and supped only on fruit. Within a month of my experimenting with the fruit-diet, all my joints became rheumatic; I could barely go to the toilet. Gandhiji knew everything because he always took upon himself the responsibility to feed and nurse the sick. He was the guardian of both the body and the soul. He kept me on a fruit diet, but avoiding sour fruits. He had me eat a lot of tomatoes and provided oiling to the system with olive oil.

“Early in the morning, Gandhiji would put his hand on my head. What affection, what comfort did I experience in that touch! He

would examine my mouth and tongue. After cleaning up and washing, I would go to a separate room where Gandhiji would come at the appointed time. He would prepare about two liters of lukewarm whitish soapy water solution, add about 25 grams of castor oil, and give me a douche of that solution. After this cleansing the bowels I had to sit in a tub [full of water] for half an hour, massaging my stomach. I then bathed with cold water. This treatment was administered every alternate day; on the intermittent day there would be a 'steam-bath'. Thus the blood in my body was [gradually] purified. The diet was now altered to wheat *chapatis* [unleavened bread], olive oil and ripe tomatoes. My pain was reduced, but became 'mobile' – one day in the knees, another day in the wrists, and another day in the back or in the finger joints. However, it was an essential part of the treatment to continue to work and not to be bed-ridden. The daily routine was as follows: 6-7 a.m., ablutions and bowel-clearing etc.; 7-8, with the

students at school; 8-9, treatment: douche etc. or steam-bath; 9-10, kitchen work; 10-12, lunch and rest; 12-2, work as compositor at the press [for the journal, *Indian Opinion*]; 2-4., picking fruits or preparing plantation beds in the gardens; 4-5, work in the kitchen; 5-6, supper; 6-7, relaxation or strolling around; 7-7:30, prayers; 7:30-8:30, conversation and discussion on varied topics with Gandhiji; 9-6, rest and sleep (during illness; when healthy I would get up at 4 a.m.).

“My treatment continued for three months. Gandhi rarely left the ashram. As I recall now his exacting care, I feel overwhelmed. During the initial stage of the treatment, when I was unable to sit up, he would examine my stool after the douche to see if the food was getting digested, and then would clean the pot himself. I can compare his care only with that of my mother who unhesitatingly looked after my needs regardless of the uncleanliness entailed. The soul-filling experience is fresh in my mind even after twenty years. **I was cured of rheumatism for good.**”

Various medical explanations of this are plausible. If the arthritis was due to auto-immune inflammation, then the cure must have been psychosomatic, and it is certainly arguable that such an intimate and intense relationship as Patel recalled might cause a physiological benefit (or harm, depending on the spiritual context). There could have been, however, a particular food allergy, and indeed Gandhi seems to have probed logically to identify it by eliminating one dietary component at a time. Confirming evidence that Patel continued to avoid the dangerous (to him) fruit (and the pain never recurred) would render this explanation convincing. Allergy to one or more fruits is not at all uncommon, and an allergic reaction of inflammation in multiple joints is also fairly common.

- Here is an eye-witness account of a somewhat similar case in India in 1930 during one of Gandhi's detentions:

“The Superintendent, Major Martin, had appointed a Maharashtri [a person from the province of Maharashtra] named Dattoba to cook for Bapu. The poor fellow **suffered from pain in his foot, and limped noticeably** as he went about his work.

“One day Bapu spoke to Major Martin about this. Major Martin gave Dattoba some medicine, but it did no good. A month went by, and then Bapu said to Major Martin, ‘Have you any objection to my treat-ing this man?’ ‘None whatsoever’, said the Major. Bapu said, ‘Diet is the most important part of my treatment. I shall provide him with the special things I want him to eat.’ Major Martin agreed to this also.

“Bapu started giving treatment to Dattoba. He began by keeping him on fast for a few days, and cleaned out his stomach [*sic*] with an enema. Then, for a few days, he kept him on nothing but vegetables. Later on, he kept making adjustments in his diet as occasion arose. The lame man began to improve. He said to me [the narrator was a fellow prisoner of Gandhi’s], ‘I have been bothered by this pain for years and now, look how much better my foot is! **I find no difficulty in walking whatever.** I find it so surprising – to be able to walk like other men.’”

- A simple and clear example of Gandhi inducing a good psycho-somatic effect in a sick person is the case of a British political friend, Fenner Brockway, who was hospitalized in Madras for some time in December 1927 after a car accident. Gandhi visited him daily, though also much occupied with a joint meeting of the Indian National Congress and the Indian Trade Union Congress. On the 26th – which was a Monday, Gandhi’s weekly “day of silence” – he handed Brockway a note asking how he was doing, and the patient said that because of severe pain he had been unable to sleep at night. “He took my hand, and an extraordinary calm came over me. That night I slept without a drug for the first time.”

(A relevant recent article (2018) in the *Proceedings of the [U.S.] National Academy of Sciences* is entitled “Brain-to-brain coupling during handholding is associated with pain reduction”.)

- Gandhi's own characteristic level of resilience is illustrated by the episode of the politically motivated fast that he conducted from 10th February to 3rd March 1943, while in detention during World War II. He was 73 years old but said that this was not to be a fast unto death; he would drink each day some water with lemon juice. By 19th February, however, he had lost fourteen pounds and was regarded as too weak to be weighed again. On the 20th, the symptoms were dire.

The British Surgeon General arrived (some Indian doctors were already there) and examined him, and said to him, "Mr Gandhi, as a doctor I should tell you that you have crossed the limit of your strength", and began to weep. Gandhi replied, "Why are you nervous? I am in God's hands. I have voluntarily put myself in His hands. If He wants to take me away, He will take me away. I am ready to go. If He feels that my work is not over, He will keep me here." He endured until the appointed end of the fast two weeks later, having meanwhile agreed, halfway through those two weeks, that his dose of liquid could consist of water mixed with orange juice rather than with lemon juice.



## **A sharp critique (1909) of professional medical practices**

If Gandhi when pleading in court as a lawyer had advanced arguments as meretricious as some of those in this critique of hospitals and doctors, he would have had far less success as an attorney:

“Sometimes I think that quacks are better than highly qualified doctors. Let us consider: the business of a doctor is really to rid the body of diseases that may afflict it. How do these diseases arise? Surely by our negligence or indulgence. I overeat, I have indigestion, I go to a doctor, he gives me medicine, I am cured. I overeat again, I take his pills again. Had I not taken the pills in the first instance, I would have suffered the punishment deserved by me and I would not have over-eaten again. The doctor intervened and helped me to indulge myself. My body thereby certainly felt more at ease; but my mind became weakened. A continuance of a course of medicine must,

therefore, result in loss of control over the mind. I have indulged in vice, I contract a disease, a doctor cures me, the odds are that I shall repeat the vice. Had the doctor not intervened, nature would have done its work, and I would have acquired mastery over myself, would have been freed from vice and would have become happy.

“Hospitals are institutions for propagating sin. Men take less care of their bodies and immorality increases. European doctors are the worst of all. For the sake of a mistaken care of the human body, they kill annually thousands of animals. They practice vivisection. No religion sanctions this. All say that it is not necessary to take so many lives for the sake of our bodies.

“These doctors violate our religious instinct. Most of their medical preparations contain either animal fat or spirituous liquors; both of these are tabooed by Hindus and Mohammedans. We may pretend to be civilized, call religious prohibitions a superstition and want only to indulge in what we like.

“The fact remains that the doctors induce us to indulge, and the result is that we have become deprived of self-control and have become effeminate. In these circumstances, we are unfit to serve the country. To study European medicine is to deepen our slavery.

“It is worth considering why we take up the profession of medicine. It is certainly not taken up for the purpose of serving humanity. We become doctors so that we may obtain honours and riches.

“I have endeavoured to show that there is no real service of humanity in the profession, and that it is injurious to mankind. Doctors make a show of their knowledge, and charge exorbitant fees. The populace, in its credulity and in the hope of ridding itself of some disease, allows itself to be cheated. Are not quacks then, whom we know, better than the doctors who put on an air of humaneness?

“[Every Indian doctor should] give up medicine and understand that rather than mending bodies he should mend souls<sub>[,]</sub> that it is

better that bodies remain diseased rather than that they are cured through the instrumentality of the diabolical vivisection that is practiced in European schools of medicine, and if any patients come to him, tell them the cause of their diseases, and advise them to remove the cause rather than pamper them by giving useless drugs. He will understand that if by not taking drugs, perchance the patient dies, the world will not come to grief and that he [the doctor] will have been really merciful to him [the would-be] patient.”

This critique is from a booklet which he wrote in such a passionate mood (on the ship taking him back from England to Africa) that his right hand would occasionally become cramped and then he would write the next page with his left hand. I suppose that this venting against doctors must have consoled him for the loss of his vocation to become a professional doctor himself.

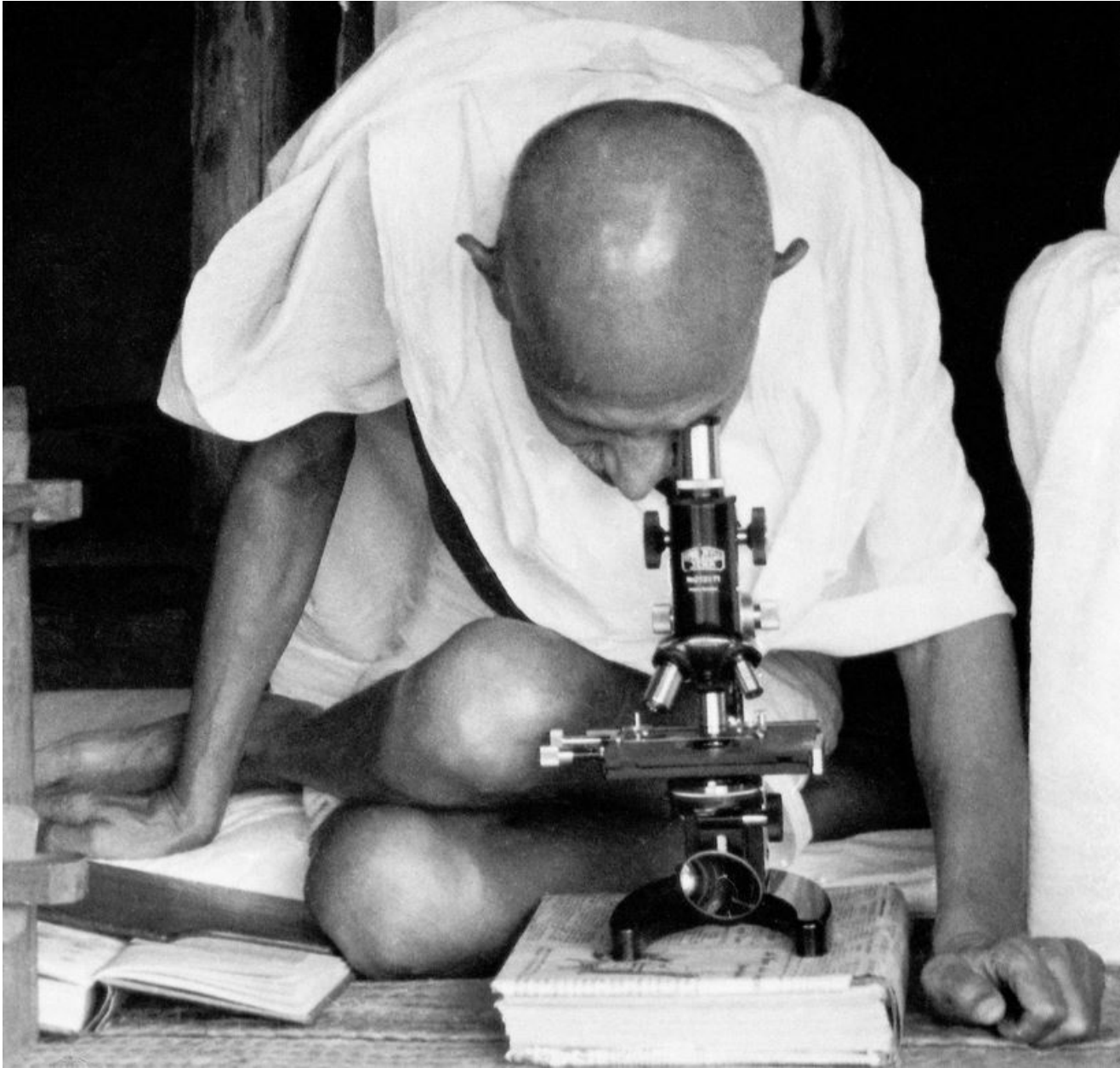
## His incipient but shallow acquaintance with modern chemistry

The following texts on chemistry were among the *ca.*5000 books in his possession in 1933 when Sabarmati Ashram was closed down and he gave the books to the new municipal library of Ahmedabad:

- Samuel Cooke, *First Principles of Chemistry: An Introduction to Modern Chemistry for Schools and Colleges* (Bombay 1875).
- J.E. Reynolds, *Experimental Chemistry for Junior Students* (London 1887-88).
- W.A. Tilden, *Introduction to the Study of Chemical Philosophy: The Principle of Theoretical and Systematic Chemistry* (London 1888).
- H.E. Roscoe, *Chemistry* (London 1897).
- J.B. Chapman, *Biochemistry: A Domestic Treatise* (St. Louis 1900).

- H.E. Roscoe, *Inorganic Chemistry for Beginners* (London 1913).
- R.A. Gregory, *Elementary Physics and Chemistry: First Stage ... Second Stage ... Third Stage* (3 vols., London 1911-1914).
- R.A. Gregory, *Introductory Chemistry* (London 1914).
- H.E.H. Pratt, *Chemistry and First Aid* (Bombay 1914).
- G.H. Bailey, *The Tutorial Chemistry* (London 1919).

He knew that he didn't know what he would have learned if he had studied for an M.D. degree. That is what the following slide means. (It shows him examining leprosy cells in 1939.)



His chemistry teacher in secondary school had been worse than mediocre. Gandhi recalled in 1925, in a speech to college science students:

“I well remember the classes that I used to attend on chemistry. It seemed to me then to be one of the dullest subjects. (Laughter.) I know now what an interesting subject it is. Although I am an adorer of all my teachers, I must confess to you that the blame was not mine but that of my teacher. He asked me to learn by heart all those awful sounding names without knowing what they [the chemicals] were. He never agreed to place even the different metals before me. I had simply to learn things by heart. He brought frightful notes carefully written by him, read those notes to us; we had to copy those notes and memorize them. I revolted and failed in that one subject, so much so that he might not have issued to me the certificate for going in for my matriculation examination. Fortunately for me, I was at that time ill; he took pity on me and issued the certificate.”



## Pro and Con *vis à vis* “quackery”

Gandhi’s applications of the words “quack” and “quackery” and of equivalent words in his native tongue, Gujarati, imply **ambivalence toward Western medical science**. (The ambivalence endured, and we Westerners also should feel some of it – at least in the sense of criticizing and correcting defects.) The following examples of how he used those words suggest to me that until the 1920s there was, in his attitude, not only ambivalence but also “cognitive dissonance”:

- In 1908 in an essay (about a crime wave) published in Gujarati:  
“Our duty [in regard to social strife] is to search out the hidden causes and suggest permanent remedies. It is quackery [*vaido*] to apply ointment on a boil; the infection should be traced to its source and effectively treated.”

- In 1909 in a letter to an Englishman:

“I accepted the invitation of the Peace and Arbitration Society to speak to them on ‘East and West’. It came off last night. The following are the conclusions: ..... Quackery is infinitely preferable to what passes for high medical skill.”

- In 1912-13 in letters to Gokhale:

“One word from the quack physician [i.e. Gandhi himself]. Ample fasting, strict adherence to two meals, entire absence of condiments of all kinds from your food, omission of pulses, tea, coffee, etc., regular taking of Kuhne baths, regular and brisk walking in the country (not the pacing up and down for stimulating thought), ample allowance of olive oil and acid fruit and gradual elimination of cooked food – and you will get rid of your diabetes and add a few more years than you think to your life of service in your present body.” (4th December)

“Could the quack physician know the exact condition of his patient and whether he is carrying out his directions which he undertook to do!”  
(14th February)

“I am glad that you are much better now.... As your quack physician, I shall certainly want to know all about your health, diet, etc.” (7th June; Gokhale died, a year and a half later, at the age of 48.)

- In 1913 in the concluding chapter of a book-length essay in Gujarati on health:

“[Western] medical science is based on inconclusive experiments. Most of it is quackery.”

- In 1921 in a speech inaugurating a national medical college oriented primarily toward traditional Muslim *unani* practices:

“I have nothing but praise for the zeal, industry and sacrifice that have animated the modern [Western] scientists in the pursuit after truth. I regret to have to record my opinion based on considerable experience that our *hakims* and *vaid*s do not exhibit that spirit in any mentionable degree. They follow without question formulas. They carry on little investigation. The condition of indigenous medicine is truly deplorable. Not having kept abreast of modern research, their profession has fallen largely into disrepute. I am hoping that this college will try to remedy this grave defect and restore Ayurvedic and Unani medical science to its pristine glory.

“I hope that this college will set its face absolutely against all quackery, Western or Eastern, and that it will inculcate among the students the belief that the profession of medicine is not intended for earning fat fees, but for alleviating pain and suffering.”

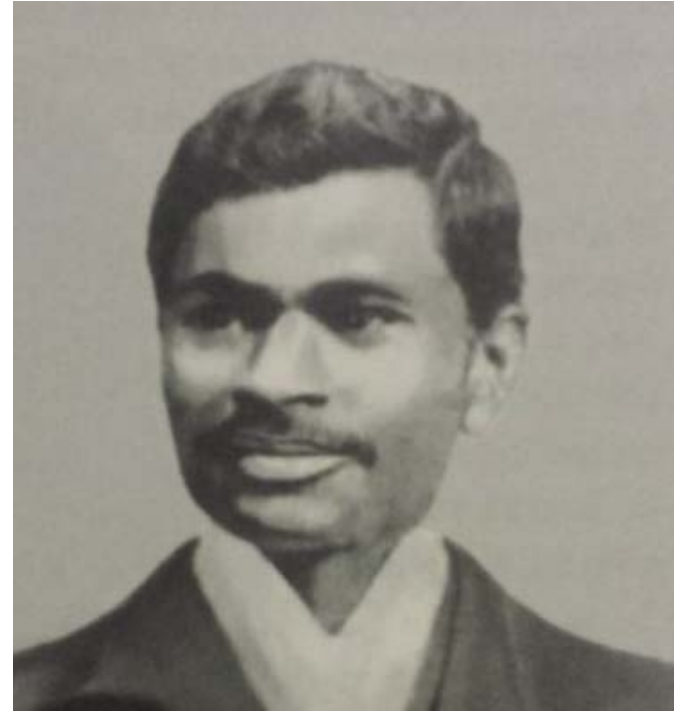
It seems to me that in these last remarks, the cognitive dissonance was overcome and Gandhi challenged correctly all the various kinds of doctors.

(A few first-rate M.D. researchers are nowadays studying biochemically how certain botanical ingredients in certain Ayurvedic medicines function in human bodies. I think there could also be some other scientifically valid ways to meet the challenge. They would require the courage to distinguish clearly between treatments which work reliably from those which don't, and to describe clearly the risks. Taking a dosage of *any* particular kind of medicine entails a risk of harm; you shouldn't take it unless the risk entailed by not taking it is greater.)

## **Some Western-type doctors whose medical expertise he esteemed**

Some of them served in substantial political as well as medical ways, but our interest here is only in Gandhi's esteem for their medical expertise. If we were to weigh up the amount of esteem he had for each of them and add it all up, the total would be enough to counterbalance nicely his criticisms of Western medicine. He was complicated in this way as well as in his political ideas. (It is fashionable to praise his "simplicity", but the only simple thing about Gandhi was his clothing after he started dressing like a "half-naked fakir".)

- Pranjivan Mehta. In the 1880s he and Gandhi had been friends in Rajkot *and* in London. In 1902 Gandhi arranged for him to write a handbook on treatment of plague victims, and had it distributed to volunteers coping with an outbreak of plague in a certain part of India. Their close friendship continued until Mehta's death in 1932.



- Thomas Allinson. His clearly strong influence on Gandhi's ideas was due to his writings as well as to their personal conversations. Licensed in 1879 at the age of 21 to practice medicine in Britain, he set up a practice in 1885 in London, where Gandhi arrived in 1888. He had a theory of "hygienic medicine": vegetarianism (including whole-wheat bread), exercise, fresh air, curative baths, and no alcohol, coffee, tea, tobacco (which he said causes cancer) or smallpox-vaccination. All these ideas influenced Gandhi. He and Allinson were on very cordial terms as fellow members of the London Vegetarian Society, but they disagreed about artificial birth control. Allinson advocated it, Gandhi opposed it, and each upheld the other's right to propound his view.







Their personal acquaintance was renewed in 1914 when Gandhi was visiting London and Allinson helped him recover from a weeks-long bout of pleurisy. In letters from London, Gandhi reported:

“I cannot bring my malady under control. Nor can the doctors. They would say that they could if I followed them implicitly. This I am [as a vegetarian] unable to do. I do not want to live on any terms. Dr Allinson,

the vegetarian doctor, considers my own treatment to be perfect in the circumstances. Dr [Jivraj] Mehta [see below] has [also] been most attentive. I listen to him wherever it is possible.”

and

“Finding my diet lacking in minerals, Dr. Allinson has recommended root crop and leafy vegetables. My diet consists of three spoons of extract of dry bananas and tomatoes and a spoon of oil in the morning. In the afternoon I eat biscuits made out of wheat and banana flour boiled with a small carrot and half of a small turnip. Sometimes, instead of turnip and carrot, I take the paste of two raw leaves of cabbage. For the evening, I have two spoons of boiled rice with raw vegetables, with soaked figs and bits of *roti* made out of banana and wheat-flour. I intend to abandon wheat and revert to nuts. I have two apples in the morning. I have noticed no harm to my system after one month of adapting to raw-vegetable diet.”

- Josiah Oldfield (1863-1953). In 1890-91 they shared a flat in London and were fellow vegetarians. The photo shows them at a meeting of the London Vegetarian Society. Oldfield had studied theology at Oxford University. He was about to become (in 1892) qualified as a lawyer, and then he



earned an M.D. degree in 1897. In 1905, Gandhi requested Millie Graham, who was about to migrate from England to Africa (in order to marry a good friend and colleague of Gandhi's), to visit Oldfield's hospital in London, the Humanitarian Hospital of St Francis, and study how the patients were being cared for there, because "we are going to have a sanatorium and any experience you may gain there [at Oldfield's clinic] in such matters will be most valuable". During a visit

to London in 1906, Gandhi arranged for a certain friend to be treated by Oldfield. But then, in 1909, Oldfield botched a case of particular interest to Gandhi, who commented (privately) that “Dr Oldfield has entirely fallen. Even his supposed surgical skill is now no more. We often have to break our idols” – while also expressing admiration for “a very great specialist, Sir Henry Morris”, who was the President of the Royal College of Surgeons and was about to become the President of the Royal Society of Medicine. Gandhi’s loss of regard for Dr Oldfield as a surgeon was thus **based on empirical evidence**. Gandhi was, nevertheless, the guest of honor in 1931 at a luncheon hosted in London by the Fruitarian Society presided over by Dr Oldfield.

(Oldfield wrote many books, including *The Abolition of the Death Penalty* and *How to Avoid Appendicitis*, as well as *Penny Guide to Fruitarian Diet*.)

- Lancelot Parker Booth. He was a minister of the Anglican Church as well as a medical doctor. In the mid-to-late 1890s he had a hospital in Durban where Gandhi was engaged in volunteer paramedical work. Dr Booth trained the volunteers. In 1897 a clinic superintended by Booth (St. Aidan's Hospital) was opened through funds raised by the Natal Indian Congress, which Gandhi had founded. The volunteer ambulance corps which Gandhi founded and led in 1899 (during the Boer War) received from Booth “basic medical instruction, including first aid, the dressing of wounds, ambulance training and the administering of medication”.

(I wish I could find a photo of him.)

• Bidhan Chandra Roy (1882-1962). He earned his M.D. degree in 1908 at the University of Calcutta, and in 1911 earned two post-graduate medical degrees in London (and was rated first among the candidates for membership in the Royal College of Physicians). He co-founded in 1928 the Indian Medical Association, and helped to found several medical schools. He and Gandhi collaborated on many projects. Gandhi in a letter of 1947 to a prominent American Gandhian described him as “one of our foremost physicians” and added, “Any country would be proud of him.” Roy and Gandhi were always perfectly candid with one another. Gandhi during his first “fast unto death” (i.e. unto death if need be for the sake of its political objective; this was in September 1932) sent a telegram to Roy and another doctor, saying, “YOUR ADVICE AS DOCTORS IS PERFECT. ITS HUMAN VALUE IS NEXT TO NOTHING. YOU WILL NOT HAVE A FELLOW BEING DENY HIS FAITH. THANK YOU VERY MUCH. FAST GOING WELL.”



While Dr Roy did not often treat Gandhi personally, he nonetheless represented to Gandhi Western medical expertise at its most sophisticated. In 1947, when a devotee of Gandhi's expressed anxiety that he might criticize her for being treated by Dr Roy, he replied, "Why should I be angry about your getting treated by Dr Roy? Have I not myself taken his treatment? It may not have been the same kind as you are taking but that is of no moment. I want you to be completely cured."

During Gandhi's wartime imprisonment (1942-44), the British denied the requests submitted to them by the doctors who were detained together with Gandhi and his wife, to consult with Dr Roy; but he was allowed to be on hand when Gandhi concluded his politically important fast of 1943.

• Mukhtar Ahmed Ansari (1880-1936). After studying at Madras Medical College he took his M.S. and M.D. degrees in London in 1905 and worked as a doctor there at Charing Cross Hospital (where a ward is named after him) before moving back to India. He and Gandhi were good friends and collaborated for many years on political matters. In 1927 when Gandhi was taking rest in a hill town (as advised by Dr Jivraj Mehta) and hoping for his systolic blood-pressure readings to come down from the 180s (a dangerous level), he told Dr Ansari, “It was a treat to receive your letter. But you will remember that you owe me a medical visit – [we] can’t call it professional because a professional visit will carry with it Rs.1,000 per day if not more, now that you have been twice to Europe since the promise of a visit [to me]. Someday when you and I are free I shall certainly expect [a visit from] you when we shall talk not merely of my health but about several other things of infinitely greater importance.”





In 1929, Gandhi's 16-year-old grandson Rasik died, in New Delhi, of malaria. Dr Ansari had been treating him (presumably without pay); Gandhi said that Ansari "was not merely a physician to him; he was like a father to him". Ansari was the chancellor of a university in New Delhi where Rasik and his uncle, Gandhi's youngest son Devdas, were propagating some of Gandhi's ideas. Gandhi wrote to Devdas: "It appears to me that the best remedies [for illness] are based on nature-cure methods. It seems to me that Rasik could perhaps have been saved if [such] simple remedies had been applied. One may put the same idea in another way. If Rasik had been destined to live, he would have been put in such circumstances that only nature-cure methods would have been used in his treatment. By saying all this, I do not express regret at having sent him to Delhi or at his being put under a doctor's treatment. After all, mine is only a conjecture."

Dr Ansari had in 1924 provided some diagnostic information about Gandhi himself. (You may notice, in the example from 23rd September shown on the next page, that with regard to phosphate he found an “Excess present”, that the specific gravity was, he noted, higher than the day before, etc. This kind of chemical analysis and terminology is, of course, distinctively characteristic of Western medical diagnostic procedures.)

URINALYSIS REPORT.

No. U... 69...

Mahatma MK Gandhi

Sent by... Dr. M. A. Ansari MD. MS.

on... 23.9.24.

1. Physical Characters		2. Qualitative Determination	
Quantity	165 cc	Albumin	present in trace
Colour	light straw	Glucose	nil
Appearance	Slightly turbid	Acetone	present
Odour	normal	Diacetic Acid	present
Sediment	Slightly present	B-oxbutyric Acid	nil
Specific Gravity	1.021 at 15°C	Indican	nil
Reaction	Strongly acid	Skatol	nil
3. Quantitative Determination		Chyle	nil
Acidity		Bile Pigment	nil
Albumin		Blood	nil
Glucose		*Diazo	
Uric Acid		*Cambridge Reaction	
Urea		Pus	
Chloride		Total Solids = 4.89%	
Sulphate			
Ammonia co-efficient			

4. Microscopical Examination (Centrifugated)

Casts	Hyaline	present in fair number	Erythrocytes	nil
	Granular	Small number	Pus Cells	present in small number
	Fatty	x	Epithelia	Scattered small number
	Epithelial	x	Spermatozoa	nil
	Blood	x	Urates	no trace
	Waxy	x	Phosphates	Excess present
	Cylindroids	nil	Uric Acid	nil
	Oxalates	nil	Micro-organisms	

\* Examined when specially asked for.

1. Sp. Gravity - higher than in 22.9.24.
2. albumin - same as " " " "
3. acetone - same " " " "
4. Diacetic Acid - same " " " "
5. Total Solids - Increase " " " "
6. Casts less in number than " " 22.9
7. Pus & Epithelia less number " " " "

DELHI BACTERIOLOGICAL  
LABORATORY & CLINIC.  
Chandney Chowk,  
Delhi ... 23.9.1924

*Exler*

Regard for Ansari's medical judgement is evident in the following remark from a letter sent by Gandhi in March 1936 to a British disciple of his (Mirabehn, the daughter of the admiral of the British fleet in the Indian Ocean):

“I think I told you what Dr Ansari found. He is satisfied with the condition but he is firmly of opinion that I have to go slow yet for a while. I am having all the rest I need.”

- Jivraj Mehta (1887-1978). After studying medicine in Bombay he earned his M.D. qualification in London in 1914 (top-rated among the candidates examined). They first met when Gandhi needed medical advice upon arriving there later that same year. On many occasions in the 1920s and '30s, Dr Mehta attended to him and to various colleagues of his. Dr Mehta would readily seek expert advice from specialists. Gandhi had great esteem for him, but did not always follow his advice. In 1932 Gandhi told Dr Mehta's wife, "You or the doctor need not be agitated by my decision to fast [unto death, if need be, in the "Great Fast" which Gandhi was undertaking for a political cause]. On the contrary, you should rejoice that God has granted to a co-worker a holy opportunity like this."



Dr Mehta's public services included administering hospitals, presiding over professional medical conferences, earning and enduring patriotic jail terms in 1938 and 1942, and serving as the first Chief Minister of Gujarat – Gandhi's home state – in the Republic of India.

• M.D.D. Gilder (1887-1978). He was a cardiologist who on several occasions in 1932-47 attended to Gandhi and to his wife, sometimes in collaboration with Dr Jivraj Mehta. On one occasion early in their acquaintance, Gandhi told a friend who had been diagnosed with neuritis that “Dr Gilder should renounce his degree” if it couldn’t be cured, and that probably a Nature-Cure “quack remedy” would help his friend if taken “with Dr Gilder’s permission and after careful inquiry”. In 1939 he collaborated with Gandhi in an effort to close down the liquor shops in Bombay where he was completing a two-year term as the provincial Minister of Health. In the early 1940s they were imprisoned together in Pune. In 1946 Gandhi felt obliged to cancel a visit to a region where Dr Gilder had advised him that there was some danger that he might contract plague; Gandhi explained to a friend: “I have no fear of the plague. But as a public man I cannot act as I like [in this matter]. If I disregard his order or wishes, his [medical] authority over others also would be weakened. How can I make myself responsible for that?”



- Sushila Nayyar. During her first visit to Gandhi's ashram, which was in 1929 at the age of 15 (together with her elder brother, Pyarelal, who was already a committed Gandhian), she was lovingly looked after by Gandhi's wife Kasturba, to whom she thus became quite attached. She began her medical studies in the mid-1930s in Calcutta, but took leave from them in December 1937 when Gandhi fell ill during a visit to Calcutta and Dr Roy (who was a long distance away) asked her to attend to him – which she then did for the next two years. When there was an outbreak of cholera at his ashram in 1938, her proposal that everyone take preventive inoculation was rejected by Kasturba and most of the other members of the ashram, notwithstanding a warning by Gandhi that they “might have to go into quarantine.” Sushila managed to get “practically everybody” in the nearby village inoculated, and later recalled that “due to our vigorous anti-cholera drive, the village was soon free from cholera” (this took several weeks to achieve) and that the ashram “escaped completely.”

Sushila was awarded her M.D. degree in New Delhi in May 1942. Ten weeks later she learned from “a friend in government service” that Gandhi would soon be arrested in Bombay and committed to wartime internment. She traveled forthwith to Bombay, committed herself to arrest and internment for the next few years together with him and a few of his other close associates, and served as his main personal physician for the rest of his life. (Then she earned further degrees at the Johns Hopkins School of Public Health, and served in the Republic of India as the Minister of Health from 1952, when the Constitution of the Republic was adopted, until 1955 and again for five years in the 1960s.) Experience – even more than his abiding inclination to regard women as morally superior to men – led Gandhi to trust her “allopathic” (i.e. Western-type) medical thinking more than that of the practitioners of Ayurveda.



The Viceroy released him from wartime detention in 1944 (well before the end of the war; the Viceroy feared that rioting might overwhelm the British in India if Gandhi, whose health had become dangerously frail, were to die while detained). A set of citations can outline clearly the gist of Gandhi's feelings, late in 1944 and early in 1945, about the relative virtues of Ayurvedic and allopathic treatment as applied to people, such as he was, for whom monetary costs were *not* a factor that needed to be taken into consideration.

Before showing the citations, however, let me show two samples of evidence that deluxe Western medical care was readily available to Gandhi and to his wife in their old age. Monetary constraint would not be a reason for him to choose for himself or for her an Ayurvedic or Nature Cure procedure rather than a Western-type procedure.

On the next page are some excerpts from a diagnostic “register of [Gandhi's] blood pressure”, prepared in 1939:

30.4.39.

Register of Blood Pressure.

Max. Pressure - 160 mm. Hg.

Min. Pressure - 100 mm. Hg.

Oscillometric Index - 125 mm. Hg.

-----  
ELASTICITY OF ARTERY.

The oscillations become almost zero under counter-pressure of 60 mm. Hg. The range of oscillation under diastolic pressure ~~is~~ (100 mm. Hg.) is 4.75 mm. The degree of slope of inframinimal ~~pressure~~ oscillations is proportional to the elasticity of the vessel. If @ is the angle of the slope, the index of elasticity E is the tangent of the angle @.

$$E \text{ or } \tan @ = \frac{4.75}{100 - 60} \cong 0.12.$$

Normally the value ranges between 0.2 to 0.3. The elasticity of the brachial artery is considerably reduced.

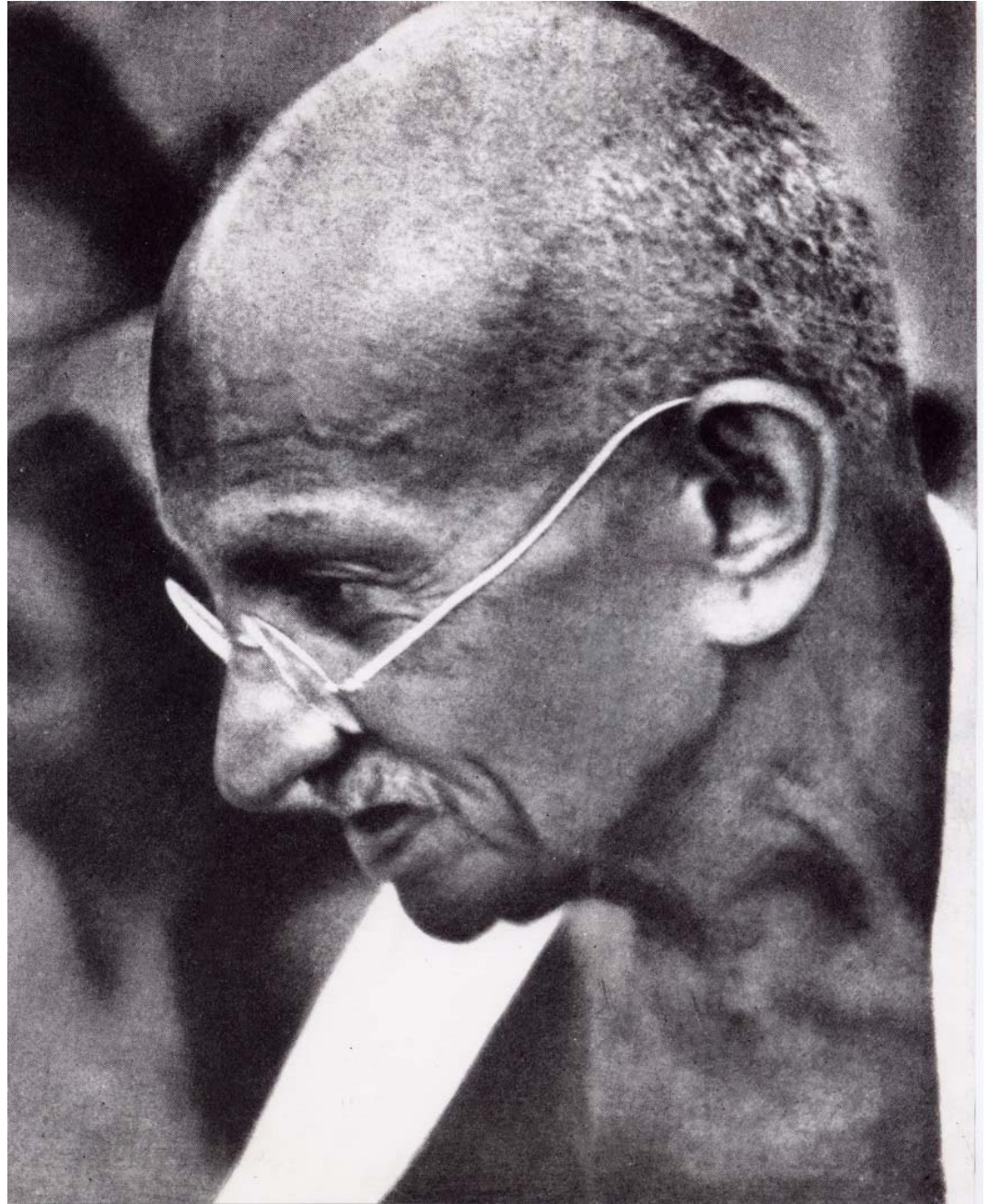
FORM OF PULSE WAVE.

The pulse wave is taken only at diastolic pressure because the arterial wall is relaxed at this moment when the systolic ~~pulse~~ impulse takes place and the artery is subjected solely to the oscillation of distension and hence the <sup>form</sup> ~~curve~~, gives an exact curve of variation of pressure within the artery, *due to systolic thrust.*

In this case the form shows rounded top followed by distinct 'c' wave, indicating well compensated heart. The level of the diastolic notch 'd' is <sup>at the distance</sup>  $\frac{1}{3}$  from the top of the wave, instead of  $\frac{1}{3}$ rd. from the top, as in normal vasomotor tone. Here the vasomotor tone shows slight relaxation.

-----  
P. Ganguli  
F. GANGULI.

(In addition to having blood-pressure problems in his old age, Gandhi was constitutionally inclined to be very active. His elder sister recalled in the 1940s that in his early childhood he had been "as restless as mercury and could not sit still even for a little while.... One of his favourite pastimes [back then] was twisting dog's ears.")



Here are some instructions, likewise from 1939, for preparing and using (via injections administered every 4 or 5 days), an autogenous vaccine for Gandhi's wife:

DR. R. G. DHAYAGUDE,  
M. D. (BOM.),  
PATHOLOGIST & BACTERIOLOGIST.  
TELEPHONE NO. 22638.

25, NEW QUEEN'S ROAD, GIRGAON.

*Bombay* 5th July 1939.

Dr. Jivraj N. Mehta, M.D., M.R.C.P. (Lond.)

Reference:- Preparation of an autogenous vaccine of the micro-organisms isolated from a specimen of sputum.

Patient's name:- Mrs. Gandhi.

PREPARATION OF AUTOGENOUS VACCINE:-

Each cubic centimetre of the vaccine contains:-

(1) Streptococcus nonhaemolytic	-	50 millions.
(2) Micrococcus catarrhalis	-	500 millions.
(3) B. Friedländer.	-	50 millions.
		-----
		600 millions.

DIRECTIONS FOR USE:-

The first six doses contain the following strength:-

Dose.	Strepto. nonhaemo.	Micro. cat.	B. Friedlander.	Total in millions
I.	$\frac{1}{2}$	5	$\frac{1}{2}$	6
II.	1	5	10	12
III.	1	10	1	12
IV.	2	20	2	24
V.	2	20	2	24
VI.	5	50	5	60

The rest of the ampoules contain the following strength:-

VII. 100 millions.  
VIII. 200 millions.  
IX. 300 millions.

Interval between the injections:-

4 to 5 days.

The vaccine should be kept in a cool and dark place. It should be shaken thoroughly before aspirating into the syringe.

*R. G. Dhayagude.*

But let us revert now to my account of Gandhi deciding, in 1944, whether to try to recover his health by traditional Indian Ayurvedic means.

He told a friend, on 30th November 1944:

“Ramesh is a very nice person but he failed to reveal the wonders of Ayurveda to me. He is hard-working. He tries to compete with Allopathy. A great deal of diligence and experience is required to compete with Allopathy.

“I have grown very weak. Sushilabehn of course recommends her line of treatment. I am still keen on getting well with the help of Ayurveda or my own methods of treatment. Let us see what I decide to do.”

This is from a statement to the press which he issued a day later:

“Dr. Sushila Nayyar assures me that there is nothing physically wrong with me except that my old friends, the hookworms and the amoebae, have not left me.”

And then this is from a letter dated 4th January 1945:

“I am reaping what I sowed. I went on taking Ayurvedic medicines without thinking and had to suffer the consequences. I am now getting rid of the poison. I am daily improving and getting stronger.”

He was of course unaware of the numerous 21st-century case reports of heavy-metal poisoning due to ingesting such medicines. But he knew his own case history, and he had by now a wealth of observations of Sushila as a medical practitioner (whom he could never suspect of greed, as she had never charged anyone a fee): She had been right about how to cope with the cholera in 1938, etc. etc. She was as selfless as it is humanly possible to be; as far as I know, the only time she ever walked away from a case (as if to protect her reputation – but really she did it out of sheer frustration) was when she told him to go talk to Dr Gilder about the penicillin. And, her medical science was entirely Western, though without any leaning to unnecessarily elaborate techniques.

In Bombay she had taken him in 1937 for a healthy walk on the beach with his grandson:



This photo shows her, a few months after his death, as a post-graduate student at Johns Hopkins University, together with her mentor there, Dr Paul Harper:





## **Gandhi's precepts as to the knowledge and skills which military first-aid workers ought to have**

These precepts were a direct outcome of his apprenticeship in Africa with Dr Booth. However, the best evidence that I have been able to find as to what Gandhi knew about first aid for battleground wounds is from many years later (October 1944) – a note in his native Gujarati, outlining from memory a list of topics to be covered in a prospective six-week training course in wartime medical first-aid:

“1. General anatomy, including description of the internal sub-divisions in the abdomen, the prominent bones, the arteries and the veins.

“2. Descriptions of the ordinary wounds such as are sustained on the battlefield and the various types of bandages for them: on the skull, the abdomen, the fingers, the legs and so on.

“3. Tourniquet, for arresting bleeding, as part of the curriculum, and also extra-curricular improvised techniques, such as with a pebble.

“4. The method of treatment in the absence of medical apparatus, e.g., warm ashes in the absence of boiled water, paper and cotton ashes; newspaper, etc., that one carries for reading in the absence of dry cloth or flannel....

“5. ‘Primitive’ remedies in the absence of medical aid for drowning, snake-bite and scorpion-sting.

“6. Stretcher drill for carrying the wounded or sick persons and making an emergency stretcher with a gun or a stick and a jacket.

“7. Marching by thousands in regular formations and marching drill according to the rules. Erecting tents on a battlefield within a few minutes, rules about the use of water, how and when to construct latrines, kitchens, etc.

“It may be that something is being omitted [in this list of mine, prepared from memory]. Most of it [the topic] is covered by the book written by Kettle. Many things are also to be found in ‘St. John's Ambulance’. We did have all these books [in our library].”

Gandhi's ability to treat scorpion sting is illustrated by the following eyewitness account of an incident, during one his prison terms in Africa, when an illiterate native attendant was "stung by a scorpion and came howling to Bapu":

"Without wasting a moment he washed that part of the Negro's hand thoroughly clean with water, dried it, and then started sucking the poison out of the sting. He sucked with such vim and gusto that much of the poison was drawn out, and the poor man began to feel better. Then Bapu applied various other treatments, and the Negro got rid of his pain."



Gandhi's ambulance corps

## **His precepts about healthy physical exercise**

As a student in London in the early 1890s, Gandhi

“...used to walk about 8 miles every day and in all I had three walks daily, one in the evening at 5.30 p.m. for an hour and the other always for 30 or 45 minutes before going to bed. I never suffered from ill health except once when I suffered from bronchitis owing to over-work and neglect of exercise. I got rid of it without having to take any medicine. The good health I enjoyed is attributable only to vegetable diet and exercise in the open air.”

He said in 1913 that

“Just as food is necessary for the mind as much as for bones and flesh, so also is exercise necessary both for body and mind. If the body has no exercise, it is sickly, and if the mind has none, it is dull.

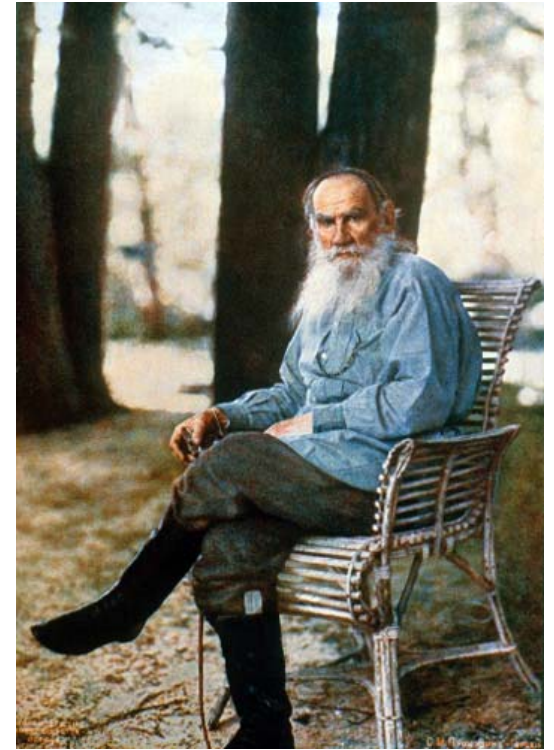
“The exercise obtained from sports such as cricket leaves much to be desired in one way and another. We must, therefore, think of a form of exercise something like what the farmer gets. Businessmen and others similarly placed can make a garden round their house and regularly spend two to four hours a day digging there. If we are living in a rented room, we should not raise any difficulty about working in another’s land, for that would indicate a small mind. We would derive nothing but benefit from working on land, no matter to whom it be-longs.

“Apart from working on land, the best form of exercise is walking. Our fakirs and sadhus are very healthy. One reason for this is that they do not use horses, carriages or other vehicles. Their journeys are always performed on foot. Walking results in rapid circulation of blood in all the parts of the body, promotes movements in every organ, and strengthens it [i.e. the body]. One should remember that the arms move during walking. A walk, to be worth the name, should cover ten or twelve miles. Those who cannot do this regularly can take long walks on Sundays.”

In 1947 he said that for a person engaged in intellectual work, to do also a substantial amount of daily physical work “will serve to improve even the quality of his intellectual output.”

The following remarks by Tolstoy, which Gandhi had read, influenced this aspect of his thinking:

“We sleep eight [hours per day]. If a man of any mental activity should devote five hours each day to his [mental] activity, he would do an enormous amount; so, what becomes of the remaining eleven hours? Physical labor not only does not exclude the possibility of mental activity, [but] improves its quality. [In my own experience,] the tenser the [physical] work was [and] the more it approached what is considered rough agricultural labor, the more enjoyments and knowledge did I acquire, and the closer and more amicable was my communion with men. In proportion as my labor became more fruitful, my demands of other people's labor became less. [And,] just as newspapers, theatres, concerts, visits, balls, cards, periodicals, [and] novels, are nothing but a means for supporting man's spiritual life outside its natural conditions of labor, so everything which we call hygiene and medicine is an attempt to deceive the natural physical demands of human nature.”





## **A summary of his book, *Key to Health* (1942)**

In 1913 a book-length essay by Gandhi about health and health-care was published in 34 installments in Gujarati in the journal *Indian Opinion*. Nearly 30 years later, while in detention during World War II, he said that he had written those texts “rather casually”, around 1906 (I think his recollection of that detail may have been mistaken), but that the material had become the most popular of all his writings and so he would now revise it. Sushila’s English translation of the revised version was published in 1948 and sells in India still nowadays at the rate of about a thousand copies per year. The many differences between the two versions are of less interest to educated people concerned about health and 21st-century health-care than to Gandhi-scholars tracing in detail the evolution of his thinking; so it will suffice here to include – on the next few pages – Gandhi’s list of the topics covered (together with the page numbers in the 1948 edition for each topic).

## AIR

- Air 8
- Oxygen 8
- Necessity of proper ventilation 8
- Breathing through the mouth 8
- Breathing through the nose 8
- Breathing exercises 9
- Cleaning the nose 9
- Drawing water through the nostrils 9
- Sleeping in the open 10
- How to cover the body 10
- Night clothes 10
- The air around us 10
- The choice of a suitable locality 10

## WATER

- How much water or liquid food during 24 hours? 11
- Drinking water must be pure 11
- Water from wells, rivers and tanks 11-12
- Role of water with regard to health 12
- Boiled water 12
- Water and religion 12

## FOOD

- Nourishment of the body 13
- Catagories of food 13
- Flesh foods 13

- Milk—animal food 13
- Sterile eggs 13
- Milk and sterile eggs 13
- Milk and sterile eggs same kind of food 13
- Medical opinion about diet 13
- Man—a vegetarian 13-14
- Fruits—fresh and dry 14
- Milk, curds and butter—necessary for the human body 14
- Consequences of exclusion of milk from my diet 14
- My vow of not taking milk 14
- Goat's milk 14
- The letter and spirit of the vow 15
- Necessity of milk in diet 15
- Drawbacks of milk 15
- Domesticated animals hardly perfectly healthy 16
- Apparently healthy animals in fact Diseased 16
- Boiled milk for safety 16
- Cattle slaughtered for meat 17
- Man's main worry 17
- Balanced diet 17
- Food needs of the human body 17
- Tissue building substances 17
- Meat and milk 18

## PART I

### THE HUMAN BODY

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- The eleventh sense 5
- The human body is the universe in miniature 5
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- What is the use of the human body? 6
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#### AIR

See chapter II, Part I

## **The origins of his vegetarianism, and some books about it that he read**

Gandhi's parents were vegetarian. When he was 13 years old, he and a Muslim school-friend secretly ate some goat meat (not pork, because of the Islamic taboo; not beef, because of the Hindu one) and he decided that a carnivorous diet would be healthier but that he would remain vegetarian for the rest of his childhood in order to avoid strife or further deception at home. But then in London at the age of 19 he read "from cover to cover" a 115-page book by Henry Salt entitled *A Plea for Vegetarianism*, was "very much impressed," and soon became active in the London Vegetarian Society. Some other books about vegetarian nutrition that he read included not only parts (prior to their publication as books) of Dr Allinson's *A System of Hygienic Medicine* and/or Allinson's *Medical Essays*, but also:



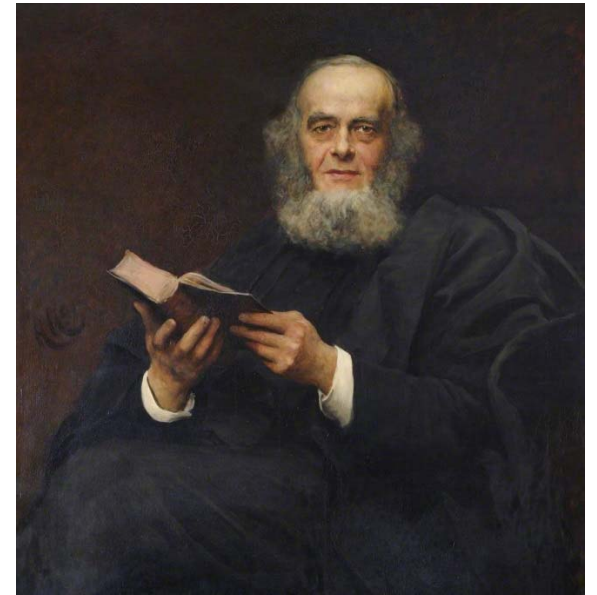
• Anna Kingsford, *The Perfect Way in Diet: A Treatise Advocating a Return to the Natural and Ancient Food of Our Race*. This was the English version (1881 and later editions) of the final thesis (*L'alimentation végétale de l'homme*, 1880) in her study in Paris for a medical degree which she earned without performing dissections (even though that method of learning was usually obligatory). She was a spiritually vibrant mystic, much admired by Gandhi on that account.\* She argued that humans are naturally meant to be non-carnivorous and that tuberculosis, gout and epilepsy are caused by eating too much meat. Often in poor health, she died at the age of 41.



\*He admired, for instance, her precept that “In order to be made in the image of God, the individual must be spiritually both man and woman.”

- A book by a certain “Dr. Nichol”, *How to Live on Six Pence a Day*, which said that one could “get good, nutritious healthy and palatable [vegetarian] food for 9s per week” in London. This book induced Gandhi stop drinking tea and coffee and to stop buying out-of-season fruits and vegetables.

- John Eyton Bickersteth Mayor, *Why Am I a Vegetarian?* (Hannover and Manchester, 1889). Mayor (b.1844) was a distinguished academic and served as president of the English Vegetarian Society from 1884 until his death in 1910.



- Benjamin Ward Richardson, *Foods for Man: Animal and Vegetable: A Comparison* (Manchester, 1891)

- Howard Williams, *The Ethics of Diet: A Biographical History of the Literature of Humane Dietetics*. (London, 1896).

- Florence Daniel, *Food Remedies: Facts about Foods and Their Medicinal Uses* (London, 1908).
- Paul Carton, *Consumption Doomed: A Lecture on the Cure of Tuberculosis by Vegetarianism*<sub>[,]</sub> delivered to the French Vegetarian Society (translated by D.M. Richardson, London, 1913).
- One of the several books (it is not known which one) written by Hereford Carrington; they had titles like “The Natural Food of Man” (1912) and “Food and Diet in Relation to Life and Health” (1925).
- John Harvey Kellogg, *The New Dietetics: What to Eat and How: A Guide to Scientific Feeding in Health and Disease* (Battle Creek, Michigan, 1923). Kellogg had invented cornflakes in 1878. Gandhi in 1927 expressed appreciation for his writings (which were on various medical topics) and then, a few months later, “got a new edition of Dr Kellogg’s book on diet” but didn’t have time to read it just then. In the mid-1930s there was a brief correspondence between them.

In 1934-35 Gandhi investigated, with the means available to him in and near the town of Wardha where he was then living, the relative nutritional values of the various locally available vegetables:

“Bapu saw the condition of the people there, and his thoughts turned seriously to problems of food and diet. He discovered that you could get but few vegetables in the Wardha market and those that were available were beyond the means of the poor. So he made inquiries in the villages round about to see what vegetables were eaten by the villagers and not sent to the Wardha market. Then such vegetables were brought to Maganwadi [his new settlement in Wardha], and carefully studied for their food value, for the amount of nourishment that would be extracted from them, and for their beneficial and harmful properties. All who ate those vegetables were asked to recount their experiences. Having experimented thus, he came to the conclusion that several of those vegetables had all the necessary nutritive elements and could be eaten with benefit by everybody.”

In 1934 Gandhi told a friend:

“As regards diet, Kuhne [see below], Just [see below], Kellogg and Carrington are good but none of them is perfect. The conclusion I have arrived at is that: (1) Juicy fruit is the most faultless diet. (2) Milk products are most essential for energy. Fresh, unboiled milk is best. (3) Too many articles of food should not be eaten in a day. Each article should be eaten separately. (4) Among the cereals wheat is good. (5) Rice is unnecessary. (6) Pulses [i.e. peas and beans] are unnecessary. This much in brief.” I think he was mistaken about the pulses.

His own last meal, an hour before he was shot dead in 1948, consisted of 14 ounces of goat's milk, 14 ounces of vegetable soup, and three (small) oranges.

The rice served at Gandhi's ashrams was whole-grain:

“I simply could not bring myself to like the Ashram rice and I said to Bapu one day, ‘Is this rice or clay, Bapu? We never eat rice like this.’ Bapu laughed. ‘I know, I know,’ he assured me mirthfully, ‘but do not be so hasty. Give it a chance to prove its worth.’

“‘The trouble is’, he said, ‘that people want their rice to be white and dainty like jasmine buds. They buy rice that has already been polished in the mills, and so denuded of its nourishing properties. That kind of rice is taboo in the Ashram. We are careful not to wash it [i.e. not to wash the whole-grain rice] too much. We allow it to soak for a long time in water, and then we cook it in such a way that neither the starch nor the water is wasted.’

“I ended up as a staunch supporter of Bapu's hand-pounded, thoroughly boiled rice.”

In 1942 he estimated as follows the foods required daily by adults “of sedentary habits”:

Fresh fruit “according to one’s taste and purse,” but preferably including the juice of two lemons or limes,

plus

2 pounds of cow's milk,

6 ounces (as measured when raw) of cereal grain (wheat, rice, bajri),

3 ounces ( " " " " ) of leafy vegetables,

5 ounces ( " " " " ) of other cooked vegetables,

1 ounce of raw vegetables (i.e. salad),

some salt “added afterwards according to taste”,

1½ ounce of ghee (liquid clarified butter) or else 2 ounces of butter,

1½ ounce gur (an Indian equivalent to molasses) or sugar.

## **His rejection of methods cruel to animals or otherwise contrary to the spirit of vegetarianism**

After avoiding vivisection by deciding (in 1909) not to study medicine professionally, Gandhi maintained his opposition to vivisection:

- “Vivisection in my opinion is the blackest of all the blackest crimes that man is at present committing against God and his fair creation.” (1921)
- “I abhor vivisection with my whole soul, I detest the unpardonable slaughter of innocent life in the name of science and humanity so-called. We [shall] realize in the fullness of time that our dominion over the lower order of creation is not for their slaughter, but for their benefit equally with ours. For I am as certain that they are endowed with a soul as that I am.” (1925)
- “To kill living animals for medicinal purposes to learn suturing – is this the work of a human being? It is the work of the devil.” (1926)



A sense of despair about the issue seems evident in the following excerpts from an article of his published in 1937:

“I have before me nearly fifty letters from America asking me to do what I can to prevent the export of *Macacus Rhesus* monkeys from India to America for purposes of vivisection. My sympathies are wholly with my correspondents. If I had the power I would not send a single monkey abroad for vivisection or slaughter. My advice to my correspondents is that they should promote representations to the Government of India which, if they are well supported, are bound to be listened to by them. The other way obviously is a strong public agitation in India against the practice of sending monkeys abroad. Of this, so far as I can see, there is not much prospect. The public hardly know that there is any export of monkeys. And I do not know how to prevent private persons from carrying on what must be to them a lucrative trade. All, therefore, that I can do is to express the pious wish that India will be no party to what is undoubtedly an inhuman practice. It would be wrong to subject the lower creation to living death even if it could be proved that it contributed something to the alleviation of human suffering.”

He objected not just to vivisection but also to any other avoidable cruelties to animals. He believed, for instance, that it was cruel to derive smallpox vaccine from cows. Here in one paragraph are some snippets from the chapters on smallpox in his book-length essay published in 1913:

“Vaccination [is] a savage custom. I personally feel that in taking this vaccine we are guilty of a sacrilege. Taking vaccine from a cow’s udder is an act of extreme cruelty to thousands of living creatures. This cruelty is no credit to man’s sense of pity and it behooves him, therefore, to forego any benefit that may accrue from it.”

In 1926 he told a friend:

“I do not think that the vaccine is obtained by killing cows. But I believe that it requires torturing them.”

During the six weeks before the beginning of Gandhi's heroic and politically pivotal "Salt March" in 1931 (protesting against the imperial tax on production of salt in India), children of three senior members of his commune died of smallpox, and one of his most trusted assistants pleaded with him, "I know that you do not stop anyone from vaccination. However, I wish you would advocate its use." But Gandhi was adamant. On the day when they set out on the March he told the whole commune about that advice he had received, and said:

"I have no doubt in my mind that vaccination is harmful in the end. I may be entirely mistaken. But holding the views that I do, how can I recant? What would my love of truth and my adherence to principle mean if they were to vanish at the slightest [adverse] touch of reality?"

A significant detail of the historical context is that there were a million cases of smallpox in India in the next five years after Gandhi said this, more than 40% of them fatal. The disease was eradicated throughout the world by 1980 by means of vaccinations, notwithstanding vigorous opposition to them for many years.

Gandhi's objections were but one small part of the anti-vaccination movement.

Opposition to inoculations has recently been a major cause of resurgence, here and there in the world, of various chemically preventable diseases, including polio as well as measles. It has, however, been by means of a vaccine developed by Indian scientists that polio has now been eradicated in India, and this may soon be achieved in Pakistan.

And yet another important aspect of the historical context is that back in the mid-18th century, before British imperialism gradually suppressed various features of traditional Indian culture, there had been in Bengal an elaborate, widely practiced and prevailingly successful Hindu method of obtaining and administering autogenous vaccine to prevent smallpox infections from becoming fatal. (This is not a matter of mere folklore. A well-known source of documentary evidence is a detailed “Account of the Manner of Inoculating for the Smallpox in the East Indies” (1767), addressed to the College of Physicians in London and written by a Fellow of the Royal Society. Gandhi did not know about it.)

## His belief in “Nature Cure”

(featuring hydrotherapy and mud-cures as well as vegetarian diet)

He admired the following two books by German clinicians:

- *The New Science of Healing, or the Doctrine of the Unity of Diseases, Forming the Basis of a Uniform Method of Cure, Without Medicines and Without Operations...*, translated from *Die neue Heilwissenschaft oder die Lehre von die Einheit der Krankheiten...* (1891), by Louis Kuhne (1835-1901), who had established a hydrotherapy clinic in Leipzig in 1883. (Pictures of him and of the clinic, from the 1893 edition of the German book, are shown here. It would seem to me a bit of a stretch to call bathing in that clinic a form of “nature cure”.)



• *Return to Nature: Paradise Regained* (1896), translated from *Kehrt zur Natur zurück! Die naturgemässe Lebensweise als einziges Mittel zur Heilung aller Krankheiten und Leiden des Leibes, des Geistes und der Seele. Das naturgemässe Bad, Licht und Luft in ihrer Anwendung im vollen Sinne der Natur, Die Erdkraft als wichtigstes Heilmittel der Natur, Naturgemässe Ernährung* (1896; here is a awkwardly literal translation of the title: “Turn back to Nature! The according-to-Nature way of life as the only way to heal all illnesses and sufferings of the body, of the spirit and of the soul. According-to-Nature bath(ing), light, and air in their application – in the full sense – of Nature; the strength of earth as the most important healing-means of Nature; [and,] according-to-Nature nourishment”), by Adolf Just (1859-1936).



(Just had begun in 1895 to establish mud-cure clinics in rural settings which were quite successful commercially in Germany. In 1918 he



founded a business firm selling packets of hygienic (i.e. bacteria-free) mud. His great-granddaughter owns the firm now, and German doctors do sometimes prescribe hygienic mud-packs.)



The kind of mud cures that Adolf Just sold are relatively expensive nowadays as real-estate costs are relatively greater than a hundred years ago.



Gandhi recalled in 1947 that those books by Kuhne and Just had, “over forty years ago”, made him “a confirmed convert to nature-cure”. (The books had initially been given to him by his eldest son’s father-in-law.) He had meanwhile arrived at a less favourable opinion of Henry Lindlahr’s analogous writing (in one of his books, perhaps *Nature Cure Philosophy and Practice Based on the Unity of Disease and Cure*, Chicago 1913, or *Practice of Natural Therapeutics*, Chicago 1919). Gandhi told a friend, a few weeks before his death, “I no longer hold the view I had held earlier. Greater experience has convinced me that Dr. Lindlahr’s book is quite ordinary.”

Moreover, he had said in the 1920s, in a chapter of his autobiography praising Nature Cures, that “Those who purchase Just’s book on the strength of this chapter should not take everything in it to be gospel truth. A writer almost always presents one aspect of a case, whereas every case can be seen from no less than seven points of view, all of which are probably correct by themselves, but not correct at the same time and in the same circumstances. And then many books are written with a view to gaining customers and earning name and fame. Let those, therefore, who read such books as these do so with discernment, and take advice of some experienced man before trying any of the experiments set forth, or let them read the books with patience and digest them thoroughly before acting upon them.”

We have seen that Gandhi by the end of 1944 was inclined to trust Sushila's advice more than that of the practitioners of traditional Indian Ayurveda. The following excerpt from his letter of January 1945 to a representative of the Indian Institute of Natural Therapeutics is likewise telling:

“I have met most naturopaths. They do not agree [with one another] and they are obstinate and even lazy.

“You will now see why I cannot preside or be at your conference. Nor can I send you any helpful message. It will be [i.e. would be a] critical [message]. But you may make what private use you like of this [letter from me]. I [do] want naturopathy to make real progress.”

And yet he would unhesitatingly recommend the use of Nature Cure remedies whenever the circumstances were economically too modest to allow such a deluxe range of choices between one and another kind of treatment as he himself enjoyed.

The professional purveyors of Ayurveda sometimes claim that their treatments are more “natural” than those of Western doctors. Gandhi found reason to doubt that claim, and meanwhile developed his own preferred versions (derived to a considerable extent, as we have seen, from books written by Western entrepreneurs) of “natural” health care.

In 1944 he said (in his native Gujarati) to a colleague who was dealing healthcare-wise with an epidemic in a village:

“You will soon get lots of drugs, but they will not be very helpful. Revive people’s knowledge of Nature Cure remedies. Local medicinal drugs should be made available. Give rice water.... If you mix jaggery [an Indian equivalent to molasses] with it, it will provide more energy. Teach people the rules of hygiene. If food is stopped to people suffering from fever or diarrhea and they are put on boiled water, more than fifty per cent of the cases will recover. You must have received the suggestions sent by Kishorelalbhai and Sushilabehn. I have suggested only the simplest remedies.”

A few weeks before then, he had sent a letter to a colleague who was thinking of setting up a Nature Cure clinic. Gandhi’s own health at that time was so frail that he couldn’t offer personal help, but he did offer advice (in Gujarati), including the following:

“The halls for treatment and experiment should be surrounded by decent huts for the residence of patients and children entrusted to our care. The sanatorium should grow fruit, flowers, food grains and vegetables. It should have cattle sheds and roads good enough for vehicles. It should also have a gymnasium, a tank for bathing and other facilities. Patients should be given such treatment as does not involve the use of electricity, for example, hot and cold water, steam, earth and sun-rays. Recently a nature-cure practitioner from Andhra has visited me. He has thirty acres of land and he treats about ninety patients. I would certainly wish to send you to see his sanatorium.”

In 1946, he spent nine days in a certain village setting up and directing a Nature Cure center which he then left in charge of a designated medical instructor and a designated administrative manager. His medical notes from that stint have been preserved. Here are some of the instructions he left for carrying on without him:

“The treatment [administered here] is to be limited to sun-bath, hip-bath, friction-bath, Kuhne-bath, mud-poultice, massage, [and] fomentation with hot water. [However,] Ramanama is the king of all treatments. All should rise at 4 a.m., and the [morning] prayer should be held at 4:30. All should maintain a diary. The tub [for the hip-baths] should be washed with water and hot ashes after every use. A clean brush should be used for scrubbing with the ashes. All kitchen work and cleaning should be done by the inmates themselves, and not with the help of the servants. The food should be the simplest possible.”

For readers unfamiliar with Indian culture I should explain that “Ramanama” means to call out or to say to oneself the name (*nama*) of the Hindu divinity Rama, i.e. to call upon God. A familiar practice among members of the branch of Hinduism which Gandhi promoted is to say the name repeatedly (“Rama, Rama, Rama...”). Gandhi learned this in his childhood:



“My nurse, an old servant of the family, suggested as a remedy for [my] fear of ghosts and spirits the repetition of Ramanama and so at a tender age I began repeating Ramanama to cure my fear. I think it is due to the seed sown by that good woman that today 'Ramanama' is an infallible remedy for me [in any illness].”

Perhaps one reason why repeated Ramanama might help his patients could have been that to take advice from such an incredibly prestigious counselor could rally one's psychosomatic powers of recovery more than to take the advice of a normal doctor. (It was in 1944 that Albert Einstein, halfway around the world at the Princeton Institute for Advanced Study, had said of Gandhi that “Generations to come will scarce believe that such a one as this ever in flesh and blood walked upon this earth.” There are a lot of wonderful individuals in the world today, but none with such extreme charisma as that.)

Moreover, a patient dying while calmly repeating the name “Rama” would thus spend his or her last moments in a serene way which all good doctors and friends would prefer to see.

The next few pages will show some excerpts from Gandhi’s comments in regard to a few of the clients – villagers – treated during his nine days at that clinic. This was, let us note, an arrangement very different from that in his own ashrams where he had a modicum of personal familiarity with the people whom he was treating and whom he would routinely see twice each day. Here at his Nature Cure clinic he was no more familiar with the clients than many a primary-care physician working in a modern hospital may be with some of the clients who come in and with whom he or she is directed by the hospital manager to spend on average no more than 15 minutes in each appointment. Since no boss was telling Gandhi anything like that, we may suppose that if his approach to diagnosing and treating a patient’s health problem was superficial, the cause was innocence.

- “I would advise this. She should take sun-bath in the nude, followed by a hip-bath and a friction-bath in cold water. The diet should consist of only fruit juice and milk or buttermilk. She may possibly be cured, if she has faith in Rama. If she does this much regularly, she is sure to get better. Complete cure is rather difficult.” (The claim that she was “sure to get better” may have been too optimistic, yet it is clear that Gandhi had the virtue of distinguishing between a partial and a complete cure.)
- “Urine will pass regularly, if he is seated in hot and cold water by turns. He should drink boiled water and take fruit juices and buttermilk for nourishment.”
- “What is the use of removing cataracts from a poor person's eyes? One should live with it, recite Ramanama and, when the time is up, depart with Ramanama on one's lips. If this cannot be done, she may be taken to a hospital and have the cataracts removed. I do not remember any [Nature Cure] treatment for cataract.... Did she come yesterday?”

She should be given sun-bath even in this heat so that she perspires and the boils dry up. I feel that she might derive some benefit if she lies down naked with a wet towel on her head. While doing so – lying down – she should constantly utter Ramanama. She should be given all this treatment here. We ought to clean the boils for her and bandage. She should be advised about her diet.” (The willingness to discourage the patient – on the grounds that she was poor – from having the cataracts removed surgically is shocking. However, the underlying precept – that the doctor should take into account the “quality of life” which a client may reasonably be expected to have as a result of a treatment being mooted – is sensible. A leading contemporary British economist, Lionel Robbins, in an article entitled “Interpersonal Comparisons of Utility” (1938), cited a statement allegedly made by an anonymous Brahmin to the effect that he, the Brahmin, was “ten times as capable of happiness as that untouchable over there”. Robbins argued, consequently, that to regard different people's basic

needs as being of equal importance is ethical but, alas, unscientific. Other 20th-century economists reduced this line of thinking to a doctrine that there are no objective human needs, but only desires, of which the market provides the only clear measure; apart from those woeful economists, however, let us note that responsible doctors' decisions as to how to proceed in problematic cases may often be based on informal but nonetheless hopefully realistic estimates of the extent to which this or that procedure under consideration seems likely to affect the patient's quality of life.)

- “Fruit-juices for two days; then fruit juice mixed with milk. Sun-bath, hip-bath and friction-bath. If the motion is not clear, he should try the syringe after two days. Mud poultices. Tomato juice, if tomatoes are available.”
- “The most effective treatment for rickets is sun-bath and taking milk mixed with fruit-juices.”

- “He must get himself admitted to the hospital. If he is willing [to do that] and wants to have a note [from us for the hospital], he may go with one [provided by us]. There is no other remedy for hernia. A strap-belt can also be worn. If he does not want to do all this, he should surrender to Rama and rest content.” (Impeccable advice.)
- “[The mother] should keep the girl in the sun after covering her head; mud-poultice on the stomach. The girl should be given mosambi juice. She [the mother] should seat the girl on a stool in lukewarm water. This will be enough to ensure a clear motion. If she [the young child] does not have a clean motion in spite of all this, she [the child] should be treated with the syringe. But then all this is for you people [i.e. not the mother] to do.”
- “Advised to take light sun-bath for some minutes, then in the shade and then again in the sun. She should do this for an hour. She should be given fruit-juices mixed with water. The water should be boiled. She should be regularly bathed to keep her clean.”

- “Advised to take milk mixed with fruit juices. Sun-bath only in the nude; the head must always be covered. Should sit in the sun until he perspires. When he feels very hot after sitting in the sun, he should wipe his body with a clean piece of cloth soaked in cold water. Today he should also be shown how to take a hip-bath.”
- “How can a two-year-old child be allowed to suckle? He should be given only fruit juice. He needs an enema, which can be done only here. Make the necessary arrangements.” (The idea that it is categorically wrong to nurse a baby for more than two years is mistaken. A case in point is that of Franklin Delano Roosevelt (b.1882), who was nursed by his mother until he was four years old and then had an exceptionally flourishing life and served as President of the U.S. longer than anyone before or since.)

- “What has she tied to her abdomen? In the first place she should not gird up so tight. She should lie prostrate and naked in a solitary place. She should give up eating bread, and subsist on milk and fruit. Does she pass stools? ... With whom has she come? Does she have anyone at home?”

- “Ask him what his name is and what his complaint is. What does he eat? Then ask him to lie down in the sun completely nude. He should take fruit juice only; he should sit in hot water and then in cool water and should continue this practice till he feels better. If he does not pass stools regularly, he should be treated with the syringe. For this, we shall send somebody to his place. If he will do this much regularly, the disease would be cured and then he should practice repetition of Ramanama with faith.”



There were no house calls from that clinic. But in effect there an equivalent to house calls the following year during Gandhi's walking tour of a district, Noakhali (in what was then part of India but is now Bangladesh), that had suffered from religious violence:

“The well-to-do were either dead or had escaped. Gardeners, guards, barbers, blacksmiths, carpenters, weavers and fisher folk were left behind. Their houses were burnt but they had nowhere to go.

“During the disturbances many hospitals were burnt down and not a doctor [was now] in sight for miles together. Gandhiji found in this situation an opportunity to suggest Nature Cures for small ailments. For many families he became a family physician. In a short time his reputation as a Nature Cure expert spread. Villagers spoke of the healing touch of a man of God. He had immense faith in Nature Cure but did not impose it on others. Once, two Muslim boys with kala-azar were brought to him. He called Dr Sushila Nayar, who had set up a dispensary in a nearby village. She was made to walk 6 miles daily to administer injections to the two boys.”

## **Fasting as a Health-Cure Technique**

This traditional Hindu technique was part of Gandhi's "Nature Cure" approach to curing sicknesses. His long essay of 1913 on health and health-care includes the following remarks:

"We shall now consider remedies for these four diseases.... Treatment should begin with a 36-hour fast."

"Fever has its origin generally in some stomach trouble. The first step to be taken therefore is fasting. The notion that a weak person or one suffering from fever will be weakened by fasting is entirely mistaken. By stopping all intake of food, we give the stomach a chance to do its work. The fast, therefore, must be continued for at least a day or longer. Kuhne baths should be administered during and after the fast."

Gandhi knew of course about the Ayurvedic tradition of *langhanam*, i.e. of fasting, perhaps once a month or maybe even once a fortnight, for a day or so in order to *preserve* good health. In 1929 he advised a British disciple of his, who had immigrated to India, to take “an occasional fast or semi-fast even when you are feeling well”, and two years later he told her, “An occasional fast, at least once per month, is a good thing, it seems, even for light-weight people.”

He associated fasting with “purification” of the body and/or the soul (according to the need of the occasion) and he would sometimes, as everyone knows, use fasting as a method of political or otherwise moral struggle. A grand summary of his advocacy of fasting for non-political reasons is the following sentence from an article (“The Physical Effects of Fasting”) published in *Young India* in 1925:

“With apologies to medical friends, but out of the fullness of my own experience and that of fellow-crankers, I say without hesitation, fast (1) if you are constipated, (2) if you are anaemic, (3) if you are feverish, (4) if you have indigestion, (5) if you have a headache, (6) if you are rheumatic, (7) if you are gouty, (8) if you are fretting and fuming, (9) if you are depressed, [or] (10) if you are overjoyed; and you will avoid medical prescriptions and patent medicines.”

One big difference – though far from the only one – between Gandhi and Dr Juma as medical practitioners is that Gandhi didn't take fees. Dr Juma's claims are shown legibly on the next page.



# DR. JUMA CAN TREAT, SOLVE MANY PROBLEMS SUCH AS:

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>→ Bewitched Pplc.</li><li>→ swollen body</li><li>→ Lost Lover</li><li>→ INSANITY</li><li>→ DIARRHOEA</li><li>→ MADNESS</li><li>→ TO MAKE MENS PENNIS strong</li><li>→ WOMAN WITH PREGNACY-PROBLEMS.</li><li>→ VOMITING ALL THE TIME</li></ul> | <ul style="list-style-type: none"><li>- MISFORTUNES.</li><li>- DEMAND DEBTS</li><li>- REMOVE MISUNDERSTANDING WITH ANYBODY.</li><li>- COURT CASES.</li><li>- CASINO SPECIALIST.</li><li>- BAD LUCK</li><li>- CUSTOMER ATTRACTION.</li><li>'ETC.....</li></ul> |
|---|---|

The word “fast” as a noun or verb has often been often used without saying clearly what is meant. According to a modern article (2013) by two M.D.s in Berlin, “fasting is the voluntary abstinence from solid food and stimulants (like caffeine or nicotine) for a limited period of time”, and it depends upon “the [person’s] 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* [my italics] the body's energy reserves without endangering health. During fasting, intake of food in forms of vegetable broth and vegetable or fruit juice should not exceed 500 kcal per day.” And, “When fasting is done properly, one should experience a good level of vitality and absence of hunger.” Gandhi’s concept of fasting for health was less clearly delineated.

## **Gandhi's belated recognition that overwork and getting too little sleep can be unhealthy**

“In 1936-37, Bapu's output of work was simply tremendous. He used to get up at two or three in the morning to write his letters. ‘Bapuji,’ I said, ‘you wrote a book about health, did you not? You have dealt with everything there ranging from food and digestion to sexual continence; but, (I broached my point carefully) you have left out one most important matter.’ ‘Which?’ asked Bapu, his interest quickened at last. ‘Sleep’, I said. ‘You are careful regarding everything but sleep! If your work increases, it's your poor sleep that is invariably sacrificed. How long can this go on, Bapu?’ Nature forgives abstinence from food but refuses to tolerate abstinence from sleep.’

“Bapuji said, ‘What you say implies clearly that I am not a true follower of the *Gita* [his favorite book of religious and philosophical

scripture]. The work I am doing is God's work. I am bound only to do my share of His work. If I try to do more, then that would be pride, not true service.'

"Some time passed; [then, one day quite a while later when the narrator was there again], Mahadev [Gandhi's secretary] said to me, 'Bapu is not feeling well today. He is sleeping. The moment he awoke this morning he said, "I am feeling rather ill today. My blood-pressure must have increased. Better send for the doctor." An unheard of thing, as you know, for Bapu to talk of sending for a doctor for himself.'

"I purposely kept away from Bapu that day. After the evening prayer he talked of his health. His opening words were, 'I am not yet a perfect follower of the *Gita*.'

"After that, Bapu made it a rule to pay his debt to sleep as punctiliously as he paid all his other debts."



## **His focus on hygiene and sanitation**

This major aspect of Gandhi's activism and teaching is described in detail in a survey by Y.P. Anand (2015) of hundreds of relevant citations from his writings, and in a beautifully illustrated book by Sudarshan Iyengar, published in 2016 by the Government of India.

The book mentions that at Visva-Bharati University (founded by Rabindranath Tagore with his Nobel Prize money awarded in 1913), the students and staff still celebrate, every year on March 10th, a clean-up which Gandhi during a visit there instigated on that day in 1915 after he and a "Sanitary Committee" of his choosing had made a tour of the place and found "no end of filth". (Tagore was presumably of such stature as not to feel a sense of ruffled feathers. The enduring celebration consists of everyone cleaning up their rooms.)

Back in 1908, Gandhi at the outset of his first jail term had noted with satisfaction that in the prison the latrines and bathing area were washed and disinfected daily, but still he was worried that he might contract scabies (a contagious skin disease caused by a microscopic mite), so he arranged to have his mustache and the hair on his head shaved off.

Here is how he would sometimes look *with* his mustache and head of hair:

The characteristic baldness of the Mahatma was artificial, and the artifice was originally for the sake of hygiene.



In Africa he had a political as well as an epidemiological reason for commending cleanliness to his compatriots. The Whites – and, not least, merchants resenting competition from Indians – were calling them dirty, complaining that they “eat curry and rice without any spoons” etc. Gandhi acknowledged, in an essay (in Gujarati) of 1907 about the difficulties which Indian traders were having in getting their licenses renewed, that

“In regard to lack of cleanliness, we must confess that though we are not as bad as the Europeans make us out to be, the charge is by and large justified. Very often the shop is found to be in a slovenly condition. The backyard is full of slush and dirt.”

He told his compatriots, “We should so behave that the Whites' prejudices against us are weakened”, and he gave them a meticulously compiled list of “DO”s and “DON'T”s:

“– Avoid, as far as possible, blowing your nose or spitting on swept or paved walks or in the presence of others. Dr. Murison has said that we often spread tuberculosis through our habit of spitting anywhere.

- If you want to cough, hold your handkerchief against your mouth.
- In many men, even after a bath some dirt remains in the ears or under the nails. It is necessary to pare one’s nails and keep them as well as the ears clean.
- Those who do not grow a regular beard should, if necessary, shave every day.
- One should not let mucus accumulate in the corners of the eyes.
- Every act of cleaning the body should be done in privacy.
- The turban or cap and the shoes should be clean.
- Those who chew betel-leaf and nut should do so at fixed hours, as with other kinds of food, so as to avoid giving the impression that we are eating all the time. Those who chew tobacco have a lot to think about. They disfigure every spot by spitting. Addicts to tobacco spoil the corner of the house where they chew tobacco, the whole house if they smoke, and their clothes if they take snuff.”

From the 1920s on, he took guidance from George Vivian Poore's books on rural sanitation – books with titles like *Essays on Rural Hygiene, Colonial and Camp Sanitation, Dry Methods of Sanitation*, and *The Earth in Relation to the Preservation and Destruction of Contagia*. The following references to Poore are from 1933-35:

“I shall send you the book on sanitation. Let me give you [here] the substance of Poore's method. We have followed this plan most successfully for 17 years.”

“[T]each them to rid their village of filth, to preserve health and conserve their golden manure at one and the same time. Poore's *Rural Hygiene* used to be a precious little book on this subject.”

“I have no recollection of the titles [of all the books,] but *The Earth and Colonial and Farm Sanitation*, both by Poore, should be among them. If they are with you, send them to me or bring them with you when you come.”

## **His teaching that chastity is essential to good health**

Few modern doctors share this belief, and back in 1915 some doctors in India wrote to him to object, on health grounds, to his urging the members of his ashram to vow chastity.

His precept about this can readily be linked to some aspects of his own sex life. After his marriage at the age of 12 was consummated on the wedding night and he naturally became "passionately fond" of his 13-year-old wife ("Even at school I used to think of her, and the thought of nightfall and our subsequent meeting was ever haunting me"), his lust caused him to be absent at the death of his dear father:

"It was 10:30 or 11 p.m. I was giving the massage [i.e. to his ailing father's legs]. My uncle offered to relieve me. I was glad and went straight to the bedroom. My wife, poor thing, was fast asleep. But how could she sleep when I was there? I woke her up. In five or six minutes, however, the servant knocked at the door. I started with

alarm. 'Get up,' he said, 'Father is very ill.' I knew of course that he was very ill, and so I guessed what 'very ill' meant at that moment. I sprang out of bed. 'What is the matter? Do tell me!' 'Father is no more.' So all was over! I had but to wring my hands. I felt deeply ashamed and miserable. I ran to my father's room. I saw that, if animal passion had not blinded me, I should have been spared the torture of separation from my father during his last moments. I should have been massaging him, and he would have died in my arms.

“It is a blot I have never been able to efface or forget, and I have always thought that, although my devotion to my parents knew no bounds and I would have given up anything for it, yet I was weighed and found unpardonably wanting because my mind was at the same moment in the grip of lust.

“Before I close this chapter of my double shame. I may mention that the poor mite that was born to my wife scarcely breathed for more than three or four days. Nothing else could be expected. Let all those who are married be warned by my example.”

In later years it seemed clear to Gandhi that the quality of his marriage had improved after he took in 1906 his vow of chastity (and kept it; their fourth surviving child, a boy like the other three, had been born in 1900; Gandhi himself performed the functions of a midwife, having studied a textbook on how to do it). In 1935 he told Margaret Sanger:

“[A]s long as I looked upon my wife carnally, we had no real understanding. Our love did not reach a high plane. There was affection between us always, but we came closer and closer the more we, or rather I, became restrained. There never was want of restraint on the part of my wife. Very often she would show restraint, but she rarely resisted me although she showed disinclination very often. [A dutiful wife to a demanding husband!] All the time I wanted carnal pleasure I could not serve her. The moment I bade good-bye to a life of carnal pleasure our whole relationship became spiritual. Lust died and love reigned instead.”



And, a year after Kasturba's death in 1944 he recalled:

“My earlier experience [with her had] showed her [to be] a very stubborn person. If I tried to compel her in any way she would do exactly what she herself wanted. This led to bitterness between us – short or prolonged. But as my public life gradually developed, Ba blossomed more and more, and freely merged herself in me, that is, in my work. The reason why this virtue reached its pinnacle in Ba is to be found in our brahmacharya [renunciation of sensuous pleasure].”

In 1926 he read Paul Bureau's *Towards Moral Bankruptcy* (translated from French) and a book, most likely *The Dance of Life*, by Havelock Ellis, and some other books on related subjects, and commented:

*“Towards Moral Bankruptcy* deals with [the question of birth-control by the use of contraceptives] and, as it appears to me, in a perfectly scientific manner. I cannot resist the temptation of copying the following valuable medical testimony collected in the book in support of the proposition that self-restraint is not only not harmful but necessary for the promotion of health and [is] perfectly possible.”

“I felt that I must [also] read the standard literature in favour of the [contraceptive] methods. My purpose in collecting literature on the subject was to test the accuracy, so far as a layman could, of M. Bureau's conclusions.”

And when Margaret Sanger, who as a professional nurse had served working-class immigrant women in New York, described to Gandhi in 1935 some cases of nervous breakdown due to that particular kind of moral restriction which he was advocating (and had himself adopted after begetting five children), he insisted that her evidence was “all based on examination of imbeciles. The conclusions are not drawn from the practice of healthy-minded people.” Yet he respected her for her passionate quest for moral Truth. According to her biographer,



“He acknowledged the possibility of using some form of the rhythm method. As the sun set and her interview ended, a hopeful Sanger asked if he had some message of encouragement to help her in her work. [He replied,] ‘I can only say may God guide you. Don't go away with the idea that this [visit] is a wasted effort. We have certainly come closer together.’”)



Gandhi and Margaret Sanger conversing.

## Some representative examples of Gandhi setting aside his dogmatic preferences

A Westerner who hosted Gandhi in 1931 for a week of substantial conversations found him “tenacious in his ideas; when he believes they are right, he needs repeated and decisive [contrary] experiences [or experimental results\*] before he will give them [i.e. the ideas] up.”

Gandhi in the 1930s would say things like:

“I have never made a fetish of consistency. I am a votary of Truth and I must say what I feel and think at a given moment on the question, without regard to what I may have said before on it. As my vision gets clearer, my views must grow clearer with daily practice. Where I have deliberately altered an opinion, the change should be obvious; only, a careful eye would notice a gradual and imperceptible evolution.”

\*These remarks were in French, where the word *expérience* has both meanings.

and

“I must admit my many inconsistencies. But since I am called ‘Mahatma’ [meaning “great soul”], I might well endorse [Ralph Waldo] Emerson's saying that ‘Foolish consistency is the hobgoblin of little minds.’ There is, I fancy, a method in my inconsistencies. In my opinion, there is a consistency running through my seeming inconsistencies, as in Nature there is unity running through seeming diversity.”

I am not clever enough to discern and explain what consistency may have run through *all* his remarks and deeds in regard to health and health-care. Here are, however, some examples which would have to be explained:

- After he “fell seriously ill” in August 1918 (while engaged in tense discussions of how India might win dominion status in the Empire, which he thought could be done by sending lots of volunteers to fight against Germany in the World War), his recovery six months later to good health involved a tricky re-interpretation – which he said, in his autobiography, “fills me with remorse” – of a vow which he had taken in 1906. Here are excerpts from Tendulkar’s biography of him:

“Soon Gandhi was removed to the Sabarmati ashram. Here he tried on himself hydropathy [i.e. hydrotherapy] which gave some relief but it was a hard task to build up the body. Medical advisers asked him to take meat broth and eggs, but he would not consent.

“One night Gandhi gave up himself to despair. The doctor said that it was a case of nervous breakdown but assured him that there was no danger [of dying from it]. Gandhi, however, could not get rid of the feeling that the end was near and began to devote all waking hours to listening to the Gita. [But then] Vallabhbhai brought the news that Germany had been defeated and that the [British] commissioner had

sent word that recruiting [Indians to kill Germans in Europe] was no longer necessary. It was a great relief to Gandhi.

“The second half of November Gandhi spent at a hill-station, and in December arrived in Bombay for medical treatment. There was no remedy except milk to rebuild the body. His vow [12 years earlier] not to take milk came in the way. He experimented with *mung* water, almond milk and *mowra* oil as substitutes for milk. But there was no result and he became weaker. Kasturbai [his wife] now insisted that his vow had referred only to cow’s milk or buffalo’s milk; he had only these two animals in mind. She therefore suggested that he could take goat’s milk. As he wanted to live [and achieve Indian self-rule], Gandhi ‘somehow beguiled’ himself into emphasizing the letter of the vow and decided to take goat’s milk. On January 21, 1919 Dr. Dalal performed on him a successful operation for fissures. His health gradually improved and [it was now that] he learnt and practiced spinning during convalescence in Bombay. ‘The wheel hummed merrily and had no small share in restoring me to health,’ he observed.”



- When Gandhi in 1924, toward the end of his imprisonment for “preaching disaffection” for the imperial system of government, needed an operation for appendicitis, he signed a document expressing “fullest confidence” in the British surgeon who felt it would be a mistake, given the urgency of the case, to await the arrival of an Indian colleague.

(Upon completing the operation, the surgeon and the Inspector-General of Prisons issued a statement saying that “it was a matter of congratulation that the operation had not been delayed any longer.”)

Gandhi later recalled that he had generally made things difficult for that surgeon: “He had to deal with my prohibitions. He always came to me in despair whenever he wanted me to put on a little more weight. It was with the greatest difficulty that he could persuade me to take so many of the medicines that he thought I should take and that I thought I ought not to take.”

- Syed Mahmood had occasion to call upon Gandhi at his ashram (this was most likely in 1940, when they were collaborating politically) even though he, Syed, happened to be sick at the time:

“Seeing the condition of Dr Mahmood’s health, Gandhi asked him to stay in the ashram till he was well enough and strong enough to bear the strain of heavy work. But Dr Mahmood demurred. On Gandhi’s insistence, Dr Mahmood explained his difficulty. The [medical] doctor who was treating him had prescribed chicken soup as essential for recovery. Gandhi made arrangement for Dr Mahmood to remain in the ashram and [to] have his chicken soup.

“As Dr Mahmood recalls: ‘...I protested strongly that I should not have it, but he refused to listen to me and said that when the doctor prescribes [something] you must have it.’”

Under conditions of hunger and epidemic in the mid-1940s Gandhi sanctioned public exceptions to his precept of vegetarianism. In 1944 he told a health-care worker in a village stricken by an epidemic:

“To meat-eaters you may unhesitatingly give meat-soup. Soup means water in which meat has been boiled. These things should be served hot after boiling them. This is not the time for doing our religious duty of propagating vegetarianism. Soup is bound to be useful where milk is not available.”

And in 1946 he declared:

“Fish abound in the seas around the coast of India. The war is over; there are innumerable small and medium-size vessels which were used for doing patrol and guard duties along our shores for the last five years. The R[oyal] I[ndian] N[avy] could arrange about staffing these, with the Department of Fisheries giving all assistance. Dry fish does even now form part of the normal diet of a great number of people who are very poor – that is, when it is available and they can afford to buy it.”

- In 1946, Munnalal Shah, who had been for 15 years a devoted Gandhian political and social activist and for 10 years a member of Gandhi's ashram at Sevagram, married, with Gandhi's blessing, another devoted Gandhian, Kanchan, and yet struggled – unsuccessfully – to maintain a “resolution about *brahmacharya*”, i.e. a determination to remain chaste even though married. When a pregnancy ensued, Gandhi advised him (in a paragraph which may be charitably described as full of fudge) that:

“During the period of Kanchan's pregnancy and for two years after the birth of the baby you should not cohabit with her. Doctors advise the same thing. It is for this reason that people adopt artificial methods of birth-control. I don't think, however, that your craving for indulgence is so strong as to make that necessary. But if it is, you should humbly admit the fact. There are numerous men and women who adopt artificial methods. Society does not boycott them; on the contrary, it even commends them. Sin is what we believe to be sin and virtue what we

believe to be virtue. There are but few things which are sinful or virtuous in themselves. And in the last analysis even these are so because we think them so.”

It was because of Gandhi’s concern for Kanchan’s health that he advised Munnalal to humbly “adopt artificial methods” if chastity were again to prove unfeasible. Gandhi gave medical advice to her; his letters that year to Munnalal would characteristically include remarks like “Kanchan has suffered much. She must not suffer more” and “I hope Kanchan is fine”; and Dr Roy was called upon to supervise Sushila in attending to Kanchan. **Her health mattered to Gandhi** – as it would to any good doctor – **more than his ideal of chastity**. This represents to me a key point, completing a dialectic in which the first point is that giving health care was deeply vocational for him; the second is that he maintained some critical distance from orthodox Western ideas of how to do it; and the third is that in the end, an empirical “bottom line”, the person’s health, counted for him more than his doctrines.

- Gandhi's complex moral stance in regard to vermin and dangerous animals evolved in his later years. Upon being asked in the early 1940s whether he was "no longer satisfied [morally] with the catching of snakes, rats etc. and the turning of them loose elsewhere, as is done in Sevagram [his ashram]", he replied, "That is right. If one is not prepared to live in the company of these creatures oneself, one has no right to turn them loose on other peoples' land. For that is what it comes to."

- In 1945, an Indian social worker who had earned in 1925 a degree in biology and for whom Gandhi had extraordinarily high regard,\* was invited to teach a class to the nurses in the clinic at Sevagram. During the class he undertook to make visible to them a frog's beating heart. As he recalled in 1951:

“The nurses objected. The matter was referred to Bapuji [i.e. Gandhi] and he replied, ‘Dissect the frog if that is the only way to explain the heartbeat.’ And I dissected the frog.”

If Gandhi hadn't been obliged to make an *immediate* decision, he would undoubtedly have tried to persuade the esteemed visitor to find a less cruel way to explain heartbeat to the nurses. But even so, the fact that he let his esteem for that colleague outweigh his deep aversion to vivisection is a sign of empirical humanism.

\*On one occasion Gandhi told him, “Though there is a resemblance between your thought and practice and mine superficially, I must own that yours is far superior to mine.”

## **Gandhi's approval and use of euthanasia**

In 1928, he used it for a calf and he approved of its use for humans. The following is from an eye-witness account:

“One day a calf [at the ashram near the city of Ahmedabad] fell ill. We did all we could to relieve its sufferings. We called in experts on animal diseases from villages; we called in the vet – all to no purpose. The calf went steadily from bad to worse.

“The suffering of the poor dumb creature became so intolerable, even to the onlookers, that Bapu called us together and suggested that we should give it the merciful relief of death. ‘It is the height of cruelty’, he pleaded, ‘to go on prolonging its agony like this.’

“A keen discussion arose. Shri Vallabhbhai Patel [Gandhi's most effective “can-do” lieutenant] came over from Ahmedabad and said, ‘This calf cannot last longer than two or three days at the most, but



if you kill it, you will bring a regular hornets' about your ears. We are just leaving for Bombay to collect funds – not a pie [i.e. not a cent] shall we get. Our work will suffer terribly, Bapu.'

“Bapu heard him out in grave silence. Then he said, ‘What you say is perfectly correct. But I believe that it would be sheer wickedness to deny a fellow-creature the last and most solemn service which we can render it.’

“Then Bapu called all the ashramites together..... Bapu wrote a note to someone, asking for a man to be sent with a gun..... The man came, but said, ‘It is not necessary to shoot the calf. Doctors have an injection which puts the poor creatures instantly and painlessly to sleep.’ So then a doctor was called and he administered peace to the suffering calf.

“This incident caused a tremendous furore throughout the country.”

(The man with a gun was Ambalal Sarabhai, who by means of a hefty donation in the summer of 1915 had enabled Gandhi's ashram to carry on with its work even though donations from its previous benefactors had been cut off in reaction to Gandhi's having accepted into the ashram a "humble but honest" family of three Untouchables. How did Gandhi know that Sarabhai had access to a gun? In 1928 prior to the incident of the calf in agony, Sarabhai had arranged for the shooting of sixty stray dogs, most of them rabid, on his own property. Gandhi had publicly defended the decision, saying that no one was willing to look after the dogs, they **were causing thousands of cases of rabies in humans**, to put the dogs out of their misery was tantamount to an act of nonviolence.)

In an article published a few days later, Gandhi explained:

"I got a doctor kindly to administer the calf a quietus by means of a poison injection, in my presence. The whole thing was over in less than two minutes.

“Would I apply to human beings the principle I have enunciated in connection with the calf? Would I like it to be applied in my own case? My reply is ‘Yes.’ [And,] supposing that in the case of an ailing friend I am unable to render any aid and recovery is out of the question and the patient is lying in an unconscious state in the throes of agony, then I would not see any violence in putting an end, by death, to his suffering.”

And still in the mid-1930s he would insist:

“I have no sense of shame or repentance over the taking of the life of the dying calf, whose agony I could see but could not alleviate in any other manner.”

Compare this with the fact, noted in his autobiography, that his life-saving re-interpretation in 1918 of the vow about milk which he had taken in 1906 “filled him with remorse”.

## **His choice of palliative care (instead of aggressive intervention) when his wife was dying**

Three days before Kasturba died of pneumonia in February 1944, the British authorities sent by airplane a supply of penicillin from Calcutta, where it had arrived from abroad. There was then a lot of discussion about it in the family, and with Sushila and Dr Gilder. Sushila later recalled that about an hour before Kasturba died,

“Gandhiji called me. ‘What have you people decided?’, he asked. ‘We will give her penicillin’, I replied. ‘Do you both believe that it should be given? Are you sure it will do her good?’ I could not say ‘Yes.’ It was just a trial. ‘Please talk to Dr Gilder about it’, I replied and walked away.

“Dr Gilder was called by Gandhi. He came to me afterwards. ‘Gandhiji did not know penicillin has to be given by injections’, he said. ‘Having learnt that giving penicillin means injections every three hours, he does not want us to give it to her.’

“Gandhiji was pleading with [his son], ‘Why don’t you trust God? Why do you wish to drug your mother even on her death-bed?’”

(Two reasons why Sushila wasn’t *sure* that the injections would do Kasturba good were that Kasturba was by then extremely weak and that February 1944 was quite early in the history of chemically knowledgeable uses of penicillin. Gandhi had good first-hand knowledge of how weak Kasturba had become, as he himself had regularly cleaned her after she had lost control of her bodily functions. He told the doctor, “It is my last chance to serve her.”)

## His comments on some other books about health concerns

- Johann Caspar Lavater, *Essays on Physiognomy*. He read this book in his student days in London, but found it “difficult and scarcely interesting” and said (later) that it “did not add to my knowledge”.

- Tribhuvandas Motichand Shah, *Ma-ne Shikhaman* (maybe based on Pye Henry Chavasse, *Advice to Mothers*). Gandhi recalled, in the mid-1920s:

“I studied the things necessary for safe labour. I read Dr. Tribhuvandas’ book and I nursed both my children according to the instructions given in the book, tempered here and there by such experiences as I had gained elsewhere. My careful study of the subject in Dr. Tribhuvandas’s work was of inestimable help.” (Gandhi served as midwife for the birth of his last child.)

- Either Herbert Arthur Parkyn, *Auto Suggestion: What it is and How to Use it* or else some other such book. Gandhi in 1923 (during a jail term) “finished reading Auto-Suggestion”.

- David C. Muthu, *The Antiquity of Hindu Medicine and Civilisation*. In a letter written to Muthu in 1932, Gandhi said that he was “delighted to have a copy of the new edition of that excellent book”, and was planning “to read it again”.
- Raghuvir Singh Agrawal, either *Mind and Vision: A Handbook for the Cure of Imperfect Sight Without Glasses* or another such book. In a letter written to the author in November 1932, Gandhi told him that there was “no difficulty in following your instructions”. (However, he never quit using spectacles.)
- At least some of W.J. Moore, *A Manual of Family Medicine for India*, and maybe some or all of Alexander Ambrose, *Everyone His Own Doctor*. In a letter sent to a colleague in 1934, Gandhi said:  
“I want a good guide for village workers [to be written]. The conception is to produce a book after Moore’s *Family Medicine* or *Everybody His Own Doctor*.”

## **APPENDIX: Gandhi's view of rights and *corresponding duties***

Gandhi insisted, in various contexts, on the practical value of performing the moral corresponding duty *vis à vis* this or that legal right which has been established or is being claimed. Here are three examples:

- In 1909 he told a British friend:

“The English in 1833 obtained greater voting power by violence. Did they by using brute force better appreciate their duty? They wanted the right of voting, which they obtained by using physical force. But real rights are a result of performance of duty; these rights they have not obtained. I do not wish to imply that they do no duties. They don't perform the duties corresponding to those rights; and as they do not perform that particular duty, namely, [to] acquire [political] fitness, their rights have proved a burden to them.”

- In 1921 he told a large gathering of workers on strike:



“You must insist upon your inherent right of selecting any Chairman or President you like of your Union whether out of your own ranks or anybody else. You have a right [also] to demand such wages as will enable you to sustain life, to educate your children and live as decent human beings. You are entitled to the same fresh water and fresh air as your employers. You are entitled to insist upon having leisure and recreation from day to day. But you have also corresponding duties to perform. You must render diligent and faithful service to your employers. You have to look after the property of your employers as if it was your own. These simple rights and duties once being understood must always be insisted upon and fulfilled as the case may be.”

- In 1934 he said (in a letter to a colleague) that

“since there never has been any right without a corresponding duty, in my opinion a [political] manifesto is incomplete without emphasizing the necessity of performance of duty and showing what that duty is.”

– And then in 1937 he said (in a letter to one of his nephews):

“In the matter of improving one’s health, lethargy is a sin. The human body is both a *kurukshetra* [a field of action/conflict] and a *dharma-kshetra* [a field of doing one’s duty and right action]. Insofar as it is a *dharmakshetra*, it is one’s duty to keep it in good shape.”

This Indian concept is relevant to the 21st-century political debate in the U.S. about government-subsidized health care. The government will sooner or later prove unable to pay for the citizens’ health care (no matter what theoretical right is enacted) if too many of them need health care because of the consequences of obesity and/or physical laziness and/or narcotics. The citizens’ corresponding duty is to be prudent about their own health.

## **IMPORTANT EDITORIAL NOTE FOR FELLOW SCHOLARS**

In this essay I have followed an unorthodox editorial practice which I had used also in a well-received book (sponsored in 2005 by the National Gandhi Museum in New Delhi), *Gandhi As We Have Known Him* (co-author: Lavanam Gora; 2nd ed., 2009): When the citations quoted are mere excerpts from original texts – which is usually the case – the omissions of parts of the text are usually *not* indicated by inserting three dots (“...”). The purpose is to show efficiently and without editorial fuss the directly relevant evidence from the source. Scholars wishing to see what I have omitted when taking these extractions from the excerpts should please revert to the sources indicated in these endnotes.

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## ENDNOTES

I will use the following abbreviations:

**A**, for Mahatma Gandhi, *An Autobiography, or The Story of My Experiments with Truth* (Ahmedabad, 1927 in Gujarati, 1929 in English). This book is available in many good editions and consists of four “parts” with quite few short chapters in each one. I will not refer to page numbers in any one edition, but in each case to a part (designated by a capital Roman numeral) and a chapter (designated by a small Roman numeral).

**CW**, for *The Collected Works of Mahatma Gandhi* (100 vols.; New Delhi, Publications Division, Ministry of Information and Broadcasting, Government of India, 1958-94; reissued digitally in 2015; not to be confused with an editorially inferior edition, with different paginations, which the Government of India published between the print and digital versions of this edition).

**KB**, for Kirit K. Bhavsar *et al.*, *Bibliography of Books Read by Mahatma Gandhi* (Ahmedabad, Gujarat Vidyapith, 2011, accessible at [www.gujaratvidyapith.org/booksreadbygandhiji.htm](http://www.gujaratvidyapith.org/booksreadbygandhiji.htm)).

**KK**, for Kaka Kalalkar (i.e. Dattatraya Balakrishna Kalelkar), *Stray Glimpses of Bapu*, Ahmedabad, Navajivan, 1950).

**ND**, for Narayan Desai, (tr. Tridip Suhrud) *My Life is My Message* (New Delhi; Orient Blackswan, 2009).

**NP**, for Nilam Parikh, *Gandhi's Lost Jewel: Harilal Gandhi* (New Delhi, National Gandhi Museum, 2001).

**RG**, for Ramachandra Guha, *Gandhi Before India* (Penguin India and Random House, 2013).

**S**, for Chandrashanker Shukla, ed., *Incidents of Gandhi's Life, by Fifty-Four Contributors* (Bombay, 1949).

**TM**, D. G. Tendulkar, *Mahatma: Life of Mohandas Karamchand Gandhi* (8 vols., Bombay, 1951-54; revised edition, 1960).

**V**, for Ravindra Varma, *Gandhi in Anecdotes* (Ahmedabad, Navajivan Publishing House, 2001).

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p.2, “Anyone who observes...”: Gandhi, *Key to Health* (1942), Preface, concluding paragraph.

p.5, “...had led an ambulance corps”: See <https://en.wikipedia.org/wiki/Indian-Ambulance-Corps>. The British awarded him the Queen’s South Africa Medal for this service to the empire.

p.7, “When he was 18 years old...”: A, I, xi.

p.8, “Twenty years later...”: RG, 288-89 and 60. The letter, in German, was from Hermann Kallenbach to his brother Simon, who was a doctor. The author of the book about southern Africa was a Baptist missionary, Frederick B. Meyer; the relevant remark in that book is on page 72.

p.9, “must have killed about fifty frogs...”: CW, ix, 395; “entirely off the track...”: CW, ix, 482.

p.10, “I nearly went in for medicine...”: CW, xxvi, 299-300.

p.11: *Declaration of Geneva*: see [www.wma.net/en/30publications/10policies/g1/](http://www.wma.net/en/30publications/10policies/g1/). Also relevant is that the famous “Daily Prayer of a Physician” (which has often been attributed to the ancient sage Maimonides but was more likely written by Marcus Herz, a German physician who had studied philosophy with Immanuel Kant and served as physician to Moses Mendelssohn) includes the doctor’s undertaking to “ever be ready to cheerfully help good and bad [people], enemy as well as friend” – and to see “in the sufferer ... only the human being” (and not a contemptible creature); the standard English translation is in the *Bulletin of the Johns Hopkins Hospital*, vol.xxviii (1917), 260-61.

pp.12-15: Mahadev Desai, “How Does Gandhiji Live?”, published originally in *The Illustrated Weekly of India*, republished in Chandrashanker Shukla, ed., *Gandhiji As We Know Him: by Seventeen Contributors* (Bombay 1945), 119-139; image: courtesy of the National Gandhi Museum, New Delhi.

p.16, “plenty of evidence...”: Here is one of many illustrative instances (from *KK*, 80-81): “I received a letter from [my prospective daughter-in-law] Chandan [in the town of Rajkot] saying she was ill. Bapu was leaving [from Wardha, 20 hours by rail from Rajkot] for Bombay [15 hours by rail from Wardha; 12 from Rajkot] that very day, and I had gone to the station to see him off. I told him about Chandan’s illness. Bapu demanded particulars. I handed over Chandan’s letter to him. He could not read it on account of the crowd, so he took it away with him. The next morning, before reaching Bombay, he sent Chandan a long, detailed wire telling her what medicine to take, what to do and what to avoid; also telling her to proceed immediately to Ahmedabad and take treatment from a certain *vaidya* [traditional Hindu physician] there, and so on. When he considered it necessary, he spent unstintingly. But as a rule he was the soul of thrift.”

Even during his strenuous walking tour of strife-torn Noakhali in 1946-47, Gandhi spent time treating the sick. The *Hindustan Standard* reported on 6th December 1946 that “Mahatma Gandhi is spending most of his time in attending the poor *and sick* [my italics]. Yesterday morning he again visited a Muslim house where he saw patients treated by Dr [Sushila] Nayyar. In the evening he paid a visit to the press camp and attended to a bed-ridden journalist.” Around that same time, “he found a child suffering from fever and constipation [and] decided to administer the enema himself. His attention to detail was so strong that when [N.K.] Bose suggested that he [i.e. Bose] be allowed to do the job, Gandhi gave him a detailed list [of instructions for] how to administer the enema.” (Bhashyam Kasturi, *Walking Alone: Gandhi and India’s Partition* (2001), p.71). For additional such evidence see *ND*, iv (*Svarpan (1940-1948)*), 271.

p.18, “Mr C----- had been under medical treatment...”: Millie Graham Polak, *Mr. Gandhi the Man* (London, 1931, republished in Bombay in 1949), 104-05. This author is trustworthy. Two pages later in her book one can read that “some of Mr Gandhi’s health experiments were neither wise nor beneficial. One such was made on my first baby, who, when a tiny mite of about six weeks old, was subjected to the shock of a cold mud plaster being put on the abdomen to assist in regulating its natural functions. The child screamed and doubled up at the shock, then turned blue and grew stiff. I tore the plaster off and warmed the little body next to my own, and fortunately the child soon recovered.”

p.19, “I can see Mr Gandhi now...”: Clement M. Doke (son of Joseph J. Doke, Gandhi’s first biographer), “Recollections of Mahatma Gandhi”, in *S*, 40-41 (republished in *V*, 97-98).

pp.21-22, “The most remarkable cure...”: Polak, *op. cit.* [re: page 18 above], 105-07.

p.24, “the Louis-Pasteur-Robert-Koch-*et-al.* tradition...”: see for instance [www.asm.org/index.php/component/content/article/114-unknown/unknown/4469-pasteur-koch-distinctive-ways-of-thinking-about-infectious-diseases](http://www.asm.org/index.php/component/content/article/114-unknown/unknown/4469-pasteur-koch-distinctive-ways-of-thinking-about-infectious-diseases) and [www.enotes.com/homework-help/what-robert-kochs-contributions-microbiology-320640](http://www.enotes.com/homework-help/what-robert-kochs-contributions-microbiology-320640) .

pp.25-27, “I was rheumatic...”: R.M. Patel, *Gandhi-ni-Sadhna* (in Gujarati; English adaptation, *The Making of the Mahatma*, prepared by Abid Shamsi and published by Ravindra Patel in Ahmedabad in 1990, accessed by me at [www.gandhiheritageportal.org/es/search-result/making of the mahatma](http://www.gandhiheritageportal.org/es/search-result/making-of-the-mahatma)), Part 2, Chapter 9, “The Affectionate Healer” .

pp.29-30, “The Superintendent, Major Martin...”: *KK*, 62.

p.31, “He took my hand...”: Fenner Brockway, “My Personal Memories”, in *S*, 35-36 (republished in *V*, 121-22); “Brain-to-Brain coupling...”: see [www.ncbi.nlm.nih.gov/pubmed/29483250](http://www.ncbi.nlm.nih.gov/pubmed/29483250).

p.32, “Gandhi’s own characteristic level of resilience...”: See *TM* vi (1953), 244-49 (or in the revised edition of 1962, 196-200); and see *V*, 174-76 – an account based on information in Sushila Nayar, *Bapuki Karavas Kahani* (New Delhi 1950; English-language version, *Mahatma Gandhi’s Last Imprisonment: The Inside Story*, Har-Anand Publications, New Delhi, 1996); the relevant passage is on p.227 of this latter version. Sushila’s recollections included the following details about the 12th day of the fast: “Gandhiji had become so weak that with much effort he could hardly drink half an ounce of water through the siphon tube [i.e. a straw]. The effort exhausted him. He had not the strength to speak or express himself by making signs. I shivered at the thought that the end might be near. I mustered up courage and said to him, ‘Bapu, don’t you think it is time that you made use of sweet-lime [i.e. not sour lime or lemon] juice to make water drinkable?’. There was no reply for a few minutes. I watched him closely. Then there was a slight nod of the head giving consent. Immediately I took two ounces of fresh *mosambi* juice and mixed it with two ounces of water. Little by little I poured it down his throat and he was able to swallow and retain it. As soon as the system received some fluid, the lifeless face began to show signs of life. He opened his eyes.” (See pp.230-31 in the 1996 edition.) See also *ND*, iv (*Svarpan (1940-1948)*), 107-117 and 286-87.

pp.33-36, “Sometimes I think quacks are better...”: *CW*, x, 63 (from *Hind Swaraj*, Chapter 9).

pp.37-38, “The following texts on chemistry were...”: *KB*, 1-2, 5 and 117-146.

p.39, image: courtesy of the National Gandhi Museum, New Delhi.



p.40, “I well remember the classes...”: *CW*, xxvi, 301-02.

p.41, “Our duty...”: *Indian Opinion*, 6th June 2013 issue, the last sentences of the next-to-last paragraph of the article about a crime wave in Natal.

p.42, “I accepted the invitation...”: *CW*, ix, 477-82. The 13th and final point is this list of conclusions – “India's salvation consists in unlearning what she has learnt during the last fifty years” – is salient in the book, *Hind Swaraj*, which Gandhi then wrote while sailing back from England to Africa.

pp.42-43, the letters to Gokhale: *CW*, xi, 352 and 461; xii, 104.

p.43, “...Most of it is quackery”: *CW*, xii, 164.

p.44, “I have nothing but praise...”: *CW*, xix, 356-58.

p.45, “A few first-rate M.D. researchers...”: see for instance [www.avetabiomics.com](http://www.avetabiomics.com).

p.47, “In the 1880s...: *RG*, 149; image: see Sanchari Pal, “The Untold Story of the Kathiawadi Doctor Who Had a Profound Impact on the Dandi March”, accessible at [www.thebetterindia.com/91144/pranjivan-mehta-gujarat-mahatma-gandhi-dandi-march/](http://www.thebetterindia.com/91144/pranjivan-mehta-gujarat-mahatma-gandhi-dandi-march/).

p.48, image: see <http://lovelypackage.com/allinson/> .

p.49, image: see <http://spartacus-educational.com/BUallinson.htm>; “I cannot bring my malady under control...”: *CW*, xii, 558.

p.50, “Finding my diet lacking in minerals...”: see Raojibhai M. Patel, *Gandhi-ni-Sadhna* (in Gujarati; English adaptation, *The Making of the Mahatma*, prepared by Abid Shamsi and published by Ravindra Patel in Ahmedabad in 1990, accessed by me at [www.gandhiheritageportal.org/es/search-result/making-of-the-mahatma](http://www.gandhiheritageportal.org/es/search-result/making-of-the-mahatma)), Part 2, Chapter 4.

pp.51-52, “Josiah Oldfield...”: see [www.ordergoldenage.co.uk/page30.html](http://www.ordergoldenage.co.uk/page30.html) and [www.flickr.com/photos/imperialwarmuseum/8488150825](http://www.flickr.com/photos/imperialwarmuseum/8488150825). Obituary in *The Glasgow Herald*, 3 February 1953 (see <https://news.google.com/newspapers?nid=2507&dat=19530203&id=b0JAAAAAIBAJ&sjid=i1kMAAAIBAJ&pg=1322,3000997>), *CW*, ix, 286 (Gandhi was not very familiar with the work of Sir Henry Morris, but merely mentioned his expertise as a foil to Oldfield’s evident lack of surgical skill), and *Time* magazine, 9 November 1931 (accessed at <https://livesofthefirstworldwar.org/lifestory/3324482>). Image from [www.happycow.net/blog/maverick-anti-vivisectionists-early-vegans/](http://www.happycow.net/blog/maverick-anti-vivisectionists-early-vegans/).

p.53, “Lancelot Parker Booth...”: see [www.mkgandhi.org/articles/Natal-Indian-Ambulance-Corp.html](http://www.mkgandhi.org/articles/Natal-Indian-Ambulance-Corp.html) and Peter Baxter, *Gandhi, Smuts and Race in the British Empire: Of Passive and Violent Resistance* (Pen & Sword Books Ltd, 2017), p.128.

p.54, “...medical degrees in London...”: *Dictionary of [Indian] National Biography* (Calcutta 1974), iii, 533. “Gandhi in a letter of 1947...”: *CW*, lxxxviii, 68. “YOUR ADVICE AS DOCTORS...”: *CW*, li, 139; image: <https://i.ytimg.com/vi/zBfUERNFlzg/hqdefault.jpg>.

p.55, “...the British denied the requests, but...”: *CW*, lxxvii, 70, 242 and 465. “Why should I be angry...”: *CW*, lxxxviii, 250. (The devotee was Abha, the wife of Gandhi’s grandnephew Kanu Gandhi.)

p.56, “After studying...”: see <https://en.wikipedia.org/wiki/Mukhtar-Ahmed-Ansari>; “It was a treat...”: *CW*, xxxiii, 274-75.

p.57, “In 1929, Gandhi’s 16-year-old grandson...”: *CW* xxxvi, 61 and xxxix, 432-33; *NP*, 37 and 69.

p.59, images: courtesy of the National Gandhi Museum, New Delhi.

p.60, “I think I told you what Dr Ansari found...”: *CW*, lxii, 264.

p.61, “After studying medicine in Bombay...”: [https://en.wikipedia.org/wiki/Jivraj\\_Narayan\\_Mehta](https://en.wikipedia.org/wiki/Jivraj_Narayan_Mehta). “They first met...”: *A*, IV, xxxvii. “Dr Mehta attended...”: see for instance *CW*, xvii, 55 *et passim*; xxiii, 317; xxiv, 37; xxix, 316; xxx, 297, 398; xxxiii, 209-210; xxxv, 389; xxxix, 284-87; lviii, 92; lix, 331, 425; lxi, 355; etc. Image: <http://aarkay-musings.blogspot.in/2017/08/today-is-birth-anniversary-of-dr.html>. “You or the doctor...”: *CW*, li, 81.

p.62, “He was a cardiologist who on several occasions...”: *CW*, li, 261; lv, 370; lxii, 171; lxviii, 357, 417; lxxiv, 240; lxxv, 135; lxxvii, 70 (205, 206, 209 *et passim* (including 465-66); lxxxi, 17, 414; lxxxix, 506. “Dr Gilder should...”: *CW*, lii, 176, 294. (In regard to Dr Gilder as a public figure in Bombay and a champion of prohibition, see <http://www.kamat.com/database/biographies/m-d-gilder.htm>.) “In 1939 he collaborated with Gandhi...”: *CW*, lxvii, 222; lxviii, 305; li, 81; lxix, 82, 310, 338, 387; lxx, 24, 60; lxxxi, 17. “I have no fear of the plague...”: *CW*, lxxv, 61.

p.63, “...which she then did...”: *TM*, v, 240 (where there is a reference to “massage and medicated baths”). “When there was an outbreak of cholera...”: *CW*, lxvii, 222; “Sushila managed...”: Sushila Nayar, *Kasturba: A Personal Reminiscence* (Ahmedabad, 1960; Indian edition of a book originally

published in 1948 in Wallingford, Pennsylvania, USA and entitled *Kasturba: Wife of Gandhi*), 4 and 23-24. CW, lxxvii, 216, 234 and 259.

p.65, “The Viceroy released him...”: In July the Prime Minister, Winston Churchill, sent to the Viceroy “a peevish telegram to ask why Gandhi had not died yet”. (Lord Wavell, *Viceroy’s Journal*, Oxford 1973, 79. The main point of the telegram was to deny, on grounds of military security, a request from the viceroy to permit famine-relief measures in Bengal.)

pp.66-68, images: courtesy of the National Gandhi Museum, New Delhi.

p.69, “Ramesh is...”: CW, lxxviii, 363-64; “Dr Sushila Nayyar assures me...”: CW, lxxvii, 372.

p.70: “I am reaping...”: CW, lxxix, 6; “21st-century case reports...”: see [www.ncbi.nlm.nih.gov/pubmed/16011453](http://www.ncbi.nlm.nih.gov/pubmed/16011453).

p.71, image: courtesy of the National Gandhi Museum.

p.72, image: <http://retrospective.jhu.edu/our-collection/paul-harper-with-sushila-nayar?>

pp.73-74, “1. General anatomy, including description...”: CW, lxxviii, 168-169.

p.75: “...stung by a scorpion..... Without wasting a moment...”: KK, 61.

p.76, image: courtesy of the National Gandhi Museum.

p.77, “...used to walk about 8 miles...”: *CW*, i, 120 (see also 66), cited in Sudarshan Iyengar, “Health-care – Which Way to Go” (13th HM Patel Memorial Lecture, Karamsad, 30 November 2017), 6.

pp.78-79, “Just as food is necessary for the mind...”: *CW*, xii, 22; “...even the quality of his intellectual output”: *CW*, lxxxvi, 437.

p.80, “...remarks by Tolstoy...”: Leo Tolstoy, *Что делать* (1886), translated by Aylmer Maude as *What Then Must We Do?* (revised edition, 1936), Chapter 38; cited in Mark Lindley, *J.C. Kumarappa: Mahatma Gandhi’s Economist* (Bombay, Popular Prakashan, 2017), 62. Image: *Wikipedia* entry on Tolstoy.

pp.81-88: Gandhi, *Key to Health* (Ahmedabad, Navajivan Publishing House, 1948).

p.89, “When he was 13 years old...”; *A*, I, vi-vii; “But then in London...”: *A*, I, xiv. (The full title of Salt’s book was *A Plea for Vegetarianism, and other essays*.)

p.90, “Anna Kingsford...”: *RG*, 83-84; [www.victorianweb.org/religion/kingsford1.html](http://www.victorianweb.org/religion/kingsford1.html); image: see [https://en.wikipedia.org/wiki/Anna\\_Kingsford](https://en.wikipedia.org/wiki/Anna_Kingsford). “He admired, for instance, her precept...”: He had this remark printed on the back of one of his publications issued in Africa. Later (1926) in India he told a group of his female devotees (see *CW*, xxxii, 485-86), “My ideal is this: A man should remain man and yet should become woman; similarly a woman should remain woman and yet become man. This means that man should cultivate the gentleness and the discrimination of woman; and woman should cast off her timidity and become brave and courageous.”

p.91, “A book by a certain Dr Nichol ... induced Gandhi to stop drinking tea and coffee”: *RG*, 52-53; “John Eyton Bickersworth Mayor...”; *CW*, i, 99. Image: <https://artuk.org/discover/artworks/john-eyton-bickersteth-mayor-18251910-fellow-president-university-librarian-classicist-139414>. See also John Archibald Venn, ed., *Alumni Cantabrigienses: A Biographical List of All Known Students, Graduates and Holders of Office at the University of Cambridge, From the Earliest Times to 1900*, vol. ii (Cambridge, UK, 1922), p.379; “Benjamin Ward Richardson...”: *CW*, i, 91, 98 and 191; “Howard Williams...”: *KB*, 6.

p.92, “Florence Daniel...” and “Paul Carton...”: *CW*, xii, 271; “One of the several books...”: *CW*, lvii, 90; “John Harvey Kellogg...”: see *CW*, xxxiii, 398; xxxiv, 13-14; liii, 36 and 179; lxii, 101 and 170; and <https://en.wikipedia.org/wiki/John-Harvey-Kellogg>.

p.93, “Bapu saw the condition of the people there...”: *KK*, 139-40. (This account mentions that Gandhi experimented a good deal with soybeans, “cooked and then ground into flour”, but that “it seems that soya beans could not give him full satisfaction, for he said nothing much about them afterwards.”)

p.94, “As regards diet...”: *CW*, lvii, 390; “His own last meal...”: Manubehn Gandhi (tr. Gopalkrishna Gandhi), *The End of an Epoch* (Navajivan Publishing House, Ahmedabad, 1962), 40. According to Brij Kishan Chandiwala, *At the Feet of Bapu* (Navajivan Publishing House, Ahmedabad, 1954), 254, it had been 12 ounces of goat’s milk and 12 of vegetable soup.

p.95, “I simply could not bring myself to like the Ashram rice...”: *KK*, 136-37.

p.96, “In 1942 he estimated as follows...”: *CW*, lxxvii, 12.

p.97, “Vivisection in my opinion...”: *CW*, xix, 357; “I abhor vivisection...”; *CW*, xix, 357; “To kill living animals...”: *CW*, xxxii, 494.

p.98, “I have before me nearly fifty letters...”: *CW*, lxvi, 139-40.

p.99, “Vaccination [is] a savage custom.....”: *CW*, xii, 110-112 and 115-117; “I do not think that the vaccine is obtained by...”: *CW*, xxx, 418.

p.100, “During the six weeks...”: *ND*, ii (*Satyagraha (1915-1930)*), 584-85.

p.101, “A significant detail of the historical context...”: see E.D. Robin and R.F. McCauley, “Smallpox – Some Unknown Heroes in Smallpox Eradication”, *Indian Journal of Medical Ethics*, vol.v/1 (January-March 1997). For a reasonably succinct comprehensive historical account see <https://en.wikipedia.org/wiki/History-of-smallpox>.

p.102: “A well-known source of documentary evidence...”: see Dharampal, *Indian Science and Technology in the Eighteenth Century: Some Contemporary European Accounts* (New Delhi, Impex India, 1971), 143-163, or else Dharampal, *Collected Works* (Goa, Other Indian Press, 2000), i, 149-166.

p.104, “Adolf Just had begun in 1895...”: see <https://en.wikipedia.org/wiki/Luvos>; image: see [www.jungborn-harz.eu/galerie](http://www.jungborn-harz.eu/galerie). (I am told that German citizens are required by law to purchase health-care insurance, and every such insurance policy has to include coverage for a basic, “minimum” list (drawn up by the government) of services. Nature-Cure treatments are not on that list,

but a citizen is permitted to purchase an insurance policy that does provide for them (or at least for some of them; different insurance companies may have different “menus” in that regard); and, *Fangopackungen* (packets of hygienic mud), whenever prescribed by a doctor, are paid for under all health-care insurance policies – and thus, some 90% of the customers for Just’s mud are German. (The English don’t go in for this kind of therapy. They make fun of it in one of their most popular songs of the second half of the 20th century, the “Hippopotamus Song”, with its refrain, “Mud, mud, glorious mud! / Nothing quite like it for cooling the blood! / So follow me, follow, / Down to the hollow, / And there let us wallow / In glorious mud.”)

p.106, “The kind of mud cures that...”: see [www.jungborn-harz.eu/geschichte-jungborn](http://www.jungborn-harz.eu/geschichte-jungborn).

p.107, “Gandhi recalled in 1947...”: *CW*, lxxxviii, 23; “...given to him by his eldest son's father-in-law”: see *NP*, 8. “Dr. Lindlahr’s book is quite ordinary”: *CW*, xc, 55.

p.108, “Those who purchase Just’s book...”: *A*, IV, vii, last paragraph.

p.109, “I have met most naturopaths...”: *CW*, lxxix, 51-52; “...purveyors of ayurveda sometimes claim...”: google “natural ayurveda” and “natural ayurvedic”.

p.111, “You will soon get lots of drugs...”: *CW*, lxxviii, 374.

p.112, “The halls for treatment...”: *CW*, lxxviii, 168-69. “In 1946, he spent nine days...”: *TM*, vii, 93-98 and six of the intervening pages of photographs.

p.113, “The treatment...”: *CW*, lxxxiii, 336-337.



p.114, “My nurse...”: A, I, x. “Generations to come...”: “Einstein on Gandhi”, preface to D. G. Tendulkar *et al.*, ed., *Gandhiji: His Life and Work. Published on his 75th birthday, October 2, 1944* (Bombay, 1944).

p.115, “Moreover, a patient dying while calmly repeating the name ‘Rama’...”: Gandhi’s own last words may have been “Rama, Rahim,” which he said meant to him “one and the same God” (“Rahim” is an invocation, prominent in Islam, of Allah as mercy); see apropos my article, “Gandhi’s Inaudible Last Words”, accessible at [www.academia.edu/303908/Gandhis-inaudible-last-words](http://www.academia.edu/303908/Gandhis-inaudible-last-words); “...directed by the hospital manager to spend on average no more than 15 minutes in each appointment”: see [www.washingtonpost.com/opinions/when-medical-care-is-delivered-in-15-minute-doses-theres-not-much-time-for-caring/2015/11/13/85ddba3a-818f-11e5-a7ca-6ab6ec20f839-story.html?](http://www.washingtonpost.com/opinions/when-medical-care-is-delivered-in-15-minute-doses-theres-not-much-time-for-caring/2015/11/13/85ddba3a-818f-11e5-a7ca-6ab6ec20f839-story.html?hpid=hp_hp-top-table-main-medical-care%3Awhen-medical-care-is-delivered-in-15-minute-doses-theres-not-much-time-for-caring%3Ahomepage%2Fstory&hpid=hp_hp-top-table-main-medical-care%3Awhen-medical-care-is-delivered-in-15-minute-doses-theres-not-much-time-for-caring%3Ahomepage%2Fstory)

pp.116-121, “I would advise.....”: CW, lxxxiii, 320-336.

p.120, “How can a two-year-old child be allowed...”: See apropos [www.breastfeeding.asn.au/bf-info/how-long-should-i-breastfeed-my-baby](http://www.breastfeeding.asn.au/bf-info/how-long-should-i-breastfeed-my-baby) and [www.babycentre.co.uk/x546897/when-should-i-stop-breastfeeding](http://www.babycentre.co.uk/x546897/when-should-i-stop-breastfeeding); “...was nursed by his mother until he was four years old...”: In 1937, she proudly mentioned this to my mother, who was at that time bottle-feeding me and considered it the up-to-date scientific way to nourish a baby. My mother later told me about the conversation.

p.122, “The well-to-do...”: ND, iv, 271.

p.123, “We shall now consider remedies...”: *CW*, xii, 103. “Fever has its origin...”: *CW*, xii, 97.

p.124, “the Ayurvedic tradition...”: see [www.ayurveda.com/resources/articles/the-ancient-ayurvedic-writings](http://www.ayurveda.com/resources/articles/the-ancient-ayurvedic-writings); “an occasional fast or semi-fast...”: *CW*, xl, 154; “...even for light-weight people”: *CW*, xlv, 81.

p.125, “With apologies to medical friends”: *CW*, xxix, 315-18.

p.127: “According to a modern article...”: see [www.karger.com/Article/FullText/357828](http://www.karger.com/Article/FullText/357828).

pp.128-129: “In 1936-37, Bapu’s output of work...”: *KK*, 148-49. (In May 1947, when Gandhi was not only fatigued by overwork but also dismayed by the religious ethnic cleansing as India was partitioned into India and Pakistan, Dr Roy asked him (see *CW*, lxxvii, 467) “Is it not your duty to take rest so that you may render more service to people?”, and his response was: “I shall certainly do so if people [would] listen to me and if I could [thus later] be of some help to them or to the [secular] authorities. But now I do not feel that I can be of use to anyone. I wish to die in harness.” He was assassinated by a fellow Hindu after 8½ more months of work.)

p.130, “survey by Y.P. Anand...”: “Cleanliness-Sanitation: Gandhian Movement and Swachh Bharat Abhiyan”, *RITES Journal*, Vol.17/2 (July 2015), 1-24; “book by Sudarshan Iyengar...”: *In the Footsteps of the Mahatma: Gandhi and Sanitation* (New Delhi, Publications Division, Ministry of Information and Broadcasting, Government of India, 2016). “The book mentions...”: *op. cit.*, 24-25; “no end of filth”: *CW*, xiii, 161. (See *KK*, 7-12 for a comprehensive and hilarious account of the episode.)

p.131, “worried that he might contract scabies”: *RG*, 168-69, where it is mentioned also that Gandhi in 1896 purchased in Madras a sulfur ointment; such an ointment is, in fact, often used for topical treatment of scabies (see apropos [www.ncbi.nlm.nih.gov/pubmed/22395587](http://www.ncbi.nlm.nih.gov/pubmed/22395587).); “a contagious skin disease caused by a microscopic mite”: This latter fact had been shown in the 17th century by an Italian doctor, Giovanni Cosimo Bonomo (*Osservazioni intorno a' pellicelli del corpo umano*), and scabies had thus become one of the first diseases with a well-understood specific cause; see apropos <https://web.stanford.edu/class/humbio103/ParaSites2006/Scabies/History.html> and <https://de.scribd.com/document/266944167/Giovan-Cosimo-Bonomo-1663-1696-Discoverer-of-the-Etiology-of-Scabies>. Image courtesy of the National Gandhi Museum.

p.132, “eat curry and rice without any spoons”: *RG*, 229-30. “In regard to lack of cleanliness...”: *CW*, vi, 293-94.

pp.132-133, “We should so behave.....”: *CW*, vi, 308-09.

p.134, “I shall send you...”: *CW*, liv, 317; “...rid their village of filth...”: *CW*, lx, 119. “I have no recollection of the titles...”: *CW*, lx, 299.

p.135-136, “...some doctors in India wrote to him...”: In the mid-1990s I read the text of the doctors’ letter as printed on a panel displayed at Sabarmati Museum. The panel was, alas, later sent to some other museum; no record was kept of which other museum got it; and the Gandhi scholars whom I know have lost track of that letter. According to C. B. Dalal, *Gandhi: 1915-1948. A Detailed Chronology* (New Delhi, Gandhi Peace Foundation, 1971), p.5, a lecture entitled “Literature on Health and Medicine” was given at Sabarmati on 4 July 1915 by “Dr. Mahadevprasad”. “After his marriage at the age of 12...”: It is often said that Gandhi was 13 years old when he married, but in fact he was

born in October of 1869 and married in May of 1882. “Even at school...”: A, I, v. “It was 10:30 or 11 p.m....”: A, I, ix.

p.137, “...we had no real understanding...”: see CW, lxii, 156-60. (Notice in this passage the nuanced distinctions between “restraint”, “disinclination” and resistance. It appears that Gandhi was here describing quite an intimate aspect of some part at least of the earlier years of his marriage. )

p.138, “My earlier experience...”: CW, lxxix, 133.

p.139, “*Towards Moral Bankruptcy* deals with...” and “I felt that I must...”: CW, xxxi, 77, 183.

p.140, “Margaret Sanger...”: see <https://en.wikipedia.org/wiki/Margaret-Sanger>. “The conclusions are not...” and “He acknowledged...”: see CW, lxii, 156-160 for a (somewhat biased) account of the entire conversation. The image is a detail from the front dust-jacket of Jean H. Baker, *Margaret Sanger: A Life of Passion* (New York, Hill & Wang, 2011).

p.141, image: CW, lxii, opposite p.161.

p.142, “tenacious in his ideas...”: In *Romain Rolland and Gandhi, Correspondence*, translated by R.A. Francis (New Delhi, 1976) from *Gandhi et Romain Rolland: correspondance, extraits du Journal et textes divers* (Paris, 1969), the last part of this remark by Romain Rolland is translated (on p.535) from his French as “he [meaning Gandhi] needs repeated and decisive experiments before he will give them up” – because the French word *expérience* means “experiment” as well as “experience”. However, “*apprendre par expérience* is normally translated as “learn from experience” rather than as “learn from experiment”. “I have never made a fetish of consistency...”: CW, lix, 61.

p.143, “I must admit my many inconsistencies...”: *CW*, xlii, 469. Emerson’s remark is in his essay of 1841 entitled “Self-Reliance”.

pp.144-145 “fell seriously ill”: *CW*, xv, 509; “fills me with remorse”: *A*, V, xxix. “Soon Gandhi was removed to Sabarmati.....”: *TM*, I, 282 (in the revised edition, 232-33).

p.146, “preaching disaffection”: see for instance [http://bombayhighcourt.nic.in/libweb/historicalcases/cases/TRIAL\\_OF\\_\\_MAHATMA\\_GANDHI-1922.html](http://bombayhighcourt.nic.in/libweb/historicalcases/cases/TRIAL_OF__MAHATMA_GANDHI-1922.html); “fullest confidence”: *CW*, xxiii, 191. “It was a matter of congratulation...”: press statement issued on 13th January 1924 by V.S. Srinivasa Sastri; reproduced in *S*, 55-60 and thence in *V*, 40. “He had to deal with my prohibitions...”: *CW*, xxvii, 44.

p.147, “Syed Mahmood had occasion...”: *CW*, v, 133; see <https://en.wikipedia.org/wiki/Syed-Mahmood>; “In 1940, when they were collaborating politically...”: see *CW*, lxxii, 5, 73 and 375. “Seeing the condition of Dr Mahmood’s health...”: Manubehn Gandhi, in her book in Hindi of which an English translation of the title is “In the Cool Shadow of Ba and Bapu”, 219-221; translated in *V*, 98-99.

p.148, “To meat-eaters...”: *CW*, lxxviii, 374. “Fish abound...”: *CW*, lxxxiii, 161.

pp.149-150, “In 1946, Munnalal Shah...”: see for example <http://support.saanjhi.in/support/solutions/articles/6000003502-1-mahatma-gandhi-s-vision-of-a-model-village>. “During the period of Kanchan’s pregnancy...”: *CW*, lxxxviii, 11. “He gave medical advice...”: see *CW*, lxxxv, 428. “Kanchan has suffered...”: *CW*, lxxxv, 202. “I hope Kanchan is...”: *CW*, lxxxviii, 11; “...arranged for Dr Roy to

supervise Sushila...”: CW, lxxxii, 375. See also lxxxiii, 344; lxxxiv, 137 (“As regards Kanchan, I do believe her complaint to be justified. I clearly see that it is your dharma [i.e. duty] to settle down somewhere with her. If your self-control breaks, it will be you who will break it. She will neither resist nor tempt you.”); lxxxiv, 244-245; lxxxv, 50, 70 (“If you two willingly observe physical brahmacharya, i.e., do not touch each other for the satisfaction of physical craving and sleep in separate beds, I will have no objection to your staying in the Ashram. If you live away from the Ashram and pursue sexual enjoyment, I will still give you work.”) and 202 “Kanchan certainly desires conjugal pleasure and to bear children. This wish on her part cannot be despised. You are a married man. No one can find fault with you if you beget progeny”) and 226; and lxxxix, 244 (“Never mind if you have more children but be calm.”). Fifty years later, I met Kanchan a few days before the wedding of one of her grandchildren. (See [www.vitastapublishing.com/images/brahmacharyagandhi\\_womenassociates.pdf](http://www.vitastapublishing.com/images/brahmacharyagandhi_womenassociates.pdf), pp.7-9, for a summary of evidence that Gandhi shared with Munnalal Shah some intimate evidence about his own experiments with chastity.)

p.151, “Gandhi’s complex moral stance in regard to vermin and...”: see [www.mkgandhi.org/bahurupi/chap26.htm](http://www.mkgandhi.org/bahurupi/chap26.htm) and Mark Lindley, *Gandhi and Humanism* (Humanist Chaplaincy, Harvard University, 4th ed., 2009), 6-7. “That is right. If one is not prepared to live in the company of these creatures oneself...”: CW, lxxvii, 207-08.

p.152, “The nurses objected...”: Gora, *An Atheist with Gandhi* (Ahmedabad, Navajivan, 1951), 37; “...far superior to mine”: CW, lxxxiii, 390. According to Mark Lindley, *The Life and Times of Gora* (Bombay, Popular Prakashan, 2009), p.74, Gandhi’s most renowned disciple in India, Vinoba Bhave, regarded Gora as “a philosopher of the category of Acharya Sankara” (the greatest Hindu monotheistic philosopher, who had lived 1100 years before).

pp.153-154, “One day a calf...”: *KK*, 77-78. (This story is retold in *V*, 108-110.)

pp.155-156, “The man with a gun was Ambalal Sarabhai...”: see Geofferey Ashe, *Gandhi...* (London, Heinemann, 1968; there have been several later editions, with various versions of the title and even of the spelling of the author’s first name), p.268. “I got a doctor kindly to administer...”: *TM*, ii (1951), 421-22; in the revised edition (1961), 320. “I have no sense of shame or repentance...”: *CW*, lix, 92; “filled him with remorse”: see *A*, *V*, xxix.

pp.157-158, “Gandhiji called me...”: Sushila Nayyar, *Kasturba: A Personal Reminiscence* (Ahmedabad, Navajivan Publishing House, 1960), 96; “early in the history of chemically knowledgeable uses of penicillin”: While it is beyond my scope to trace that history, the following details may suffice to show what I mean. In the USA in 1943, a researcher named Mary Hunt found on a cantaloupe a penicillin-related mould which ensuing experiments showed could yield (when exposed to X-rays) a form of penicillin far more effective clinically than the previously known forms (see for instance <http://peoriahistorian.blogspot.in/2013/04/we-called-her-moldy-mary.html>) and meanwhile a practical fermentation method for producing large amounts of pharmaceutical-grade penicillin was being developed; and so by 1945 more than a million people in the world had been treated with it, whereas fewer than a thousand had been treated before Mary’s discovery. A correct account of the chemical structure of penicillin was first gained in 1945. A form of penicillin suitable for use in pills (instead of in injections – and this is relevant as Gandhi’s objection was to sticking a needle into Kasturba every three hours) was first developed in 1952, and the first chemical synthesis of penicillin was achieved in 1957. (Google “history of penicillin” apropos.)

p.159, "...did not add to my knowledge": A, I, xxv; "I studied the things necessary for safe labour...": A, III, vi; "Gandhi served...": Arun Gandhi, *Kasturba: A Life* (London, 1998 and various later editions in the UK and elsewhere, some of them with different titles), Chapter 10, 16th paragraph: "Kasturba went into labour so suddenly and the birth [of Devdas in 1900] came so quickly there was no time to summon a doctor or nurse. Once again [as also with one of her previous deliveries] the birth was difficult and Kasturba's suffering was great, but this time Mohandas delivered the baby safely all by himself. (I was not nervous," he reported [later] in his autobiography. He disclosed nothing about his wife's state of mind.) With Kasturba's health again in a fragile state, Mohandas again cared for her, their newborn and the other [three] boys. Then, in the midst of these domestic endeavors, 7-year-old Manilal came down with a serious case of smallpox. Mohandas put aside any thought of an early return to India." "[F]inished reading Auto-Suggestion": CW, xxiii, 178.

p.160: "...delighted to have a copy...": CW, xlix, 228. "No difficulty in following your instructions": CW, lii, 16-17. "I want a good guide...": CW, liv, 322.

p.161, "The English in 1833...": CW, ix, 330.

p.162, "You must insist...": CW, xxi, 132-33; "since there never has been any right without a corresponding duty...": CW, lviii, 76.

p.163, "In the matter of improving one's health...": CW, lxiv, 414.