

DOCTOR COLENZO, I PRESUME?



missionary medical practice in
midnineteenth century New Zealand
by Ian St George

Cover: Hemlock, Hyacinth, Hounds Tongue, Herb Trulove, White Horehound, Honewort, Hawkweed, Black Horehound, Houseleek.

Plate 11 from Culpeper N 1826. Culpeper's Complete Herbal and English Physician; wherein several hundred herbs, with a display of their medicinal and occult properties, are physically applied to the cure of all disorders incident to mankind. To which are added, rules for compounding medicines, and upwards of forty choice receipts, selected from the author's last legacies; forming a complete family dispensatory, and system of physick. J. Gleave and Son, Deansgate, Manchester.

WILLIAM COLENSO 1811–1899

Twenty-eleven marked the bicentenary of the birth of the Rev. William Colenso—printer, missionary, explorer, politician, botanist, educationalist, liberation theologian—and importantly herein, healer and dispenser of medicines—who wrote “I *know* something of medicine & of disease by practice extensive for many years and study; at one time I had the most complete surgery in N.Z.—& helped the Colonial Surgeon to medicines which he had not.”¹

Current fashion diminishes the work of the missionaries as monocultural and paternalistic, but that is a view biased by contemporary values. Queen Victoria would rule a quarter of the world and throughout her reign Britons saw their influence as beneficial to all who came into contact with it. They were “nursed on a mystic patriotism, a reflexive sense of belonging to something far greater than self, an empire destined to do justice in the world”.²

British missionaries would therefore be ambassadors for their culture, including the medical culture of the Enlightenment: before the arrival of medical practitioners it would be the task of the missionaries to tend to the sick and wounded. Holiness and healing were ideologically connected; cleanliness was indeed next to godliness.

Colenso’s writing (and he was a prolific writer) is rich in descriptions of his medical work. No account of the history of medical practice in the Bay of Islands, Hawke’s Bay or the Wairarapa could be considered complete without reference to the work of William Colenso.

THE CHURCH MISSIONARY SOCIETY

Although the Church Missionary Society’s Medical Department would not be established until 1891, from the beginning the missions provided medical care as well as evangelism—and education, language study and translations, printing, building and the development of agriculture and industry. In 1816 William Hall wrote to the CMS, “I can spend my time very beneficially amongst them (Māori) by conversing and bartering with them, visiting their sick and relieving them, by giving

¹ Colenso to his nephew William Colenso 14 February 1897.

² Davis W 2012. *Into the silence. The Great War, Mallory and the conquest of Everest*. Knopf, New York, p.79.

them suitable food and medicine which they are frequently in great need of.”³

Some knowledge of medical practice would therefore be of value in a missionary, though apparently no medical training was actually required or supplied by the CMS. This, after all, was colonisation: the bringing of superior British civilisation to savage heathen peoples should require no great preparation!

Māori medicine was rudimentary before the Europeans. Colenso would write,

*Their Treatment of Internal Diseases, excepting, perhaps, rheumatism, was altogether bad, yet ignorantly so; as they wholly relied on the efficacy of the objurgations, or exorcisms, of the “priest,” or skilled man. In rheumatic affections, however, among other remedies, they often resorted to a rude hot vapour bath; and both in rheumatism, and in some obstinate cutaneous diseases, the tribes living near to hot springs, and hot sulphureous mud wells, used them advantageously. But, while bad physicians, they were tolerably good surgeons,—especially in reducing dislocations, and setting broken bones,—as they knew well the economy of the human frame, from their too often cannibal feasts, as well as from their practice of cleaning the bones of the dead. They set broken bones admirably, using splints of Totara bark, or of the broad green bases of the large flax leaves; they also managed to cut off crushed fingers and toes, and even badly maimed hands, feet, and forearms, in a creditable manner, although wholly ignorant of the arterial system. Spearheads broken off within and perceived, they managed to cut out; but if not apparent, they repeatedly exorcised, to the double misery and expense of the sufferer. Recent wounds were generally left to themselves, and like their fractures, they mostly healed quickly and well; owing, no doubt, to their non-stimulating diet, temperate living, and low pulse. Old obstinate ulcers, (often arising from scrofula, or from some fragment of bone, or foreign substance remaining in the flesh, or from fungoid flesh,) they sometimes adroitly managed, by weaving a little wicker boss, or shield, which they strapped on to protect the sore. They were also clever at boils, in courageously bearing the extraction of the core by pressure, only they did it too early. Painful excoriations of the hands, by poling or paddling, they eased by the actual cautery; burning the same with live embers. In midwifery cases, they were also very expert; in severe cases extracting the fetus piecemeal; when the husband was generally the operator. They were always extraordinarily solicitous about the retention of the afterbirth. In cases of children being poisoned by eating the seeds of the Tupakihi or Tutu, (*Coriaria ruscifolia*) they generally smoked them over a heap of green*

³ William Hall to the Secretary of the CMS, 22 August 1816. Hocken Library Dunedin MS56.

bushes, having a little fire underneath, shaking them about at the same time; sometimes they also ducked them roughly in the sea or river. In cases of poisoning through eating the unprepared kernels of the Karaka (Corynocarpus laevigata), they dug a deep pit as fast as possible, in which they placed the unhappy sufferer standing, with his arms lashed to his sides, his legs tied together, and a gag in his mouth; filling in the earth, or sand, to his neck. If this treatment was well and expeditiously performed, the patient not only recovered, but had again the proper use of his limbs. The convulsions and rigidities, during the action of the poison, were dreadfully severe.

Note 14. In 1835 the writer was acquainted with a venerable old Chief, of the Nga Puhi tribes named Te Aka who gave the following narration:—He had been severely wounded in a battle, with a spear which had entered his side & the head of which had broken off within his lower abdomen. Of course he suffered dreadful pains; several “priests” successively tried their skill at charming, but to no effect; He full knew, that the spear head was within him, as it could not be felt. At length a “priestess”—of great power was obtained from a distance, who having daily examined the wounded chief, went to work. By her directions, he was shut up in a dark house, &, on the 2nd day of her charming, there suddenly fell before him a spearshead, which she said she had charmed out. The poor man was so overjoyed, that his pains instantly lessened, & he believed. She got her rewards and went home. The pains however soon returned, & remained for a long while; his friends now laughing at him for not having more courage; as he was “all right” & would soon be well. For a long time he durst not disbelieve the “priestess”—although his thoughts were occasionally hardened. When after a while the spear head shifted, worked outwards, & was cut out, that was the means of his perceiving the trick which had been played upon him by her; & of his afterwards becoming a Xn. To hear his long and artless statement of his joy & impious doubts, & fears, & his trying to suppress his natural feelings was both interesting & instructive.

Note 15. The writer well recollects having seen at Whangarei (Bream Bay) in the years 1836–9, a fine healthy youth of about 12 yrs. of age who had been recovered from poisoning by karaka kernels.⁴ He, however, had not been properly attended to,—in the tying of his limbs in their right position, while under the influence of the poison, there, & he was now a curious spectacle! reminding me of the instrument called a caltrop more than anything else.—one leg was curved up behind to his behind, & the other bent up in front, the foot outwards; one arm inclined behind his shoulder, & the other slightly back & then forwards; and all as to muscles inflexibly rigid. He could do nothing, not even turn himself, nor drive off the sandflies, which were there in legions from feasting on his naked

*body, nor scratch himself when itching; nor put any food to his mouth. When not asleep he was laughing, often seeming the merriest of the village. I frequently sat by his side during my visits to talk with him and drive away the tormenting sandflies, which he would beg me to do. His skin was remarkably fine & pretty—ruddy, I might call it,—being wholly without any eruption blemish or scar. His teeth pearly white and voice and laugh regularly strong and ringing. His eyes were very brilliant and of an intelligent cast, but in conversing with him I always thought his intellect was not so sharp (or developed) as ordinarily that of Maori boys of his age. To me his was a pre-eminently sad case; as in the event of his losing his parents (and they were now middle aged) he would be most miserably off; yet it exhibited strongly two eminent natural and beautiful traits of the old N.Z. character, viz., the love of their offspring and patience under heavy and constant affliction and trial. He was the only child of his parents; who fortunately for him were both alive, and took great care of him, and shifted his position very often by day & night, as, from his body not evenly resting, he could not possibly remain long in one position. If not eating he greatly enjoyed being placed so as he could see the children at play; in which he always encouraged them by his voice.*⁵

Rongoā Māori was a late development. Gluckman wrote,

*Most authorities believe that the Maori had no system of medical practice prior to the coming of the European, with the exception of a crude surgery and that the introduction of plants and herbals is a post European introduction.*⁶

The Europeans had little patience with indigenous beliefs or practices. Fancourt could write, even in 1939 (p.4),

Another common superstition which was responsible for untold misery and suffering among the Maoris, was the belief that all disease and bodily pain was due to demoniacal possession—that is, ‘atua ngautangata,’ literally man-assailing demons. The treatment of the disease consisted simply in expelling the

⁴ Karaka contains karakin and other nitropropanoyl glucosides have been isolated from the flesh of the fruit. These cause violent convulsions and permanent paralysis

⁵ Colenso W 1868. On the Maori races of New Zealand. *Transactions of the New Zealand Institute* 1: 75p. The “Notes” were never published and the versions given here are taken from rough drafts in the Mitchell Library, Sydney, (ML reference A237: essay pp. 103-265, notes pp. 266–278).

⁶ Gluckman LK 1976. *Medical history of New Zealand prior to 1860*. Gluckman, Auckland, p.148.

*evil spirit by means of the recital of magic formulae by the 'tohunga' or priest, who acted as doctor. Such a belief in the cause of disease prevented any advance of medical knowledge among the Maoris, and subsequently acted as a powerful obstacle to medical aid by the missionaries, whose efforts were regarded as an impious interference with the activities of supernatural beings.*⁷

Religious conversion must therefore precede rational medical care. Fancourt added (pp.42–43),

The Maoris' treatment of the sick was appalling. Their adherence to their old superstitious customs was a great means of increasing the patient's sickness and depopulating the country. As soon as a person became ill he was made 'tapu', and was not allowed to remain in the house, but was conveyed to an open shed, and being exposed to the air, his sickness increased and death in most cases was the natural consequence, particularly if it happened to be the winter season. The patient was not allowed to feed himself; he was prohibited most kinds of food and the result was that the poor sufferer was practically starved to death. The only treatment for disease rendered by the natives was the recital of magic formulae by the 'tohunga', who sought to expel the demons who had entered the body of the sufferer. As long as the natives held to their former superstitious beliefs the missionaries were not able to bring relief to them in the form of medical treatment, for this was regarded as an impious interference with the activities of the supernatural beings.... Thus before the missionaries could administer to the sick, they had first to overcome the obstacle of 'tapu', and then expel the Maories' ancient belief as to the cause of disease. When once they were successful in doing this, they were able to give great relief to the poor sufferers.

Whatever the truth, these were the missionaries' perceptions. But did they really "overcome the obstacle of 'tapu'"? or did they create their own version?

⁷ Fancourt HC 1939. *The Advance of the Missionaries, being the expansion of the C.M.S. Mission south of the Bay of Islands, 1833–1840*. Reed, Wellington.

THE WAGES OF SIN IS DEATH

“Colenso tended to explain a lot of Maori sickness in terms of immorality or negligence,” wrote Paul Goldsmith. “Maori, on the whole, were more amenable than settlers to Colenso’s notions of causality. Colenso was anxious to make the most of this.”⁸

Indeed William and Elizabeth Colenso appeared to have exploited the one-way temporal association between those two common phenomena, sin and death, implying a causal link. Thus they indulged in victim-blaming, and in doing so re-created *atua ngautangata* in their own fashion: in 1847 Colenso’s journal has this...

22 June (at Wharerangi in Hawke’s Bay).... During our reading a fine child was accidentally burnt; I dressed his burns which were merely superficial as well as I could....

3 July.... This evening, at dusk, Naaman⁹ (the poor little child who was slightly burnt at Wharerangi on the 22nd. ult.,) was brought for me to see and prescribe for. I was not a little surprised to see the Child brought, as its burn was so very superficial, though large, that I scarcely thought anything of it—and more so to hear his foster-parents say, “he is very bad—the stench is dreadful, &c.” On examining the little fellow, oh! how sadly he was altered! from a very fine child, fat & healthy, to a thin and weakly-looking object. We undid the cloths of its leg and thigh, & found it to be in a mortifying state, no doubt caused by gross neglect, coupled with the wet state of the weather, which obliged the Natives to remain day and night within their huts by the side of their fires. We dressed its wounds, and gave it food, and desired the persons who brought it to bring it again early in the morning.

4. LORD’S-day. This morning early the child was again brought, and Mrs. Colenso remained at home to attend to it.

6. In dressing and attending to Naaman this morning, it was very evident to us that the hand of death was upon him. After dressing his wounds I had just gone over to the study, and was occupied with Leonard, my N(ative) Teacher, and Daniel, from Wharerangi, who had just arrived express having some what important to communicate, when Mrs. Colenso called out, the Child is dead! We hastened back to the house, and found the poor little thing breathing its

⁸ Goldsmith PJ 1996. Medicine, Death and the Gospel in Wairarapa and Hawke’s Bay, 1845–1852. *NZJH* 30 (2): 163–181.

⁹ The biblical name indicates the child had been baptised.

last. His foster-parents (Baptized) exclaimed, to the Natives who had come up, that Naaman had been killed with the medicine which we had given it! (Mrs. Colenso had just given it a spoonful of wine,) and, repeating the same words two or three times hurried off with the Child. Thus are we repaid! We may yet, however, have some trouble to undergo upon this child's account. The story which Daniel had to relate was a very sad one—the adultery of Paul Kaiwata (the N. Teacher at Wārerangi) with Charlotte Tawī, an interesting young Communicant of the same place, & nearly related to him. Paul is, also, a married man, and his crime is increased by his saying, “that the religion which he professed would not keep him from either taking 2 wives, or absconding with Charlotte to the woods.” The Crime took place some time back, and was only now brought to light through Paul's beating Charlotte severely for playing and gallanting with the White Trader residing at Ahuriri. Upon reflection I thought it rather strange, that just as Daniel commenced his saddening relation, Mrs. Colenso interrupted us with her startling exclamation; Paul being closely related to this child, (who was also burnt while I was engaged with the Baptized Natives of Wārerangi in reading the New Testament,) and uncle to Naomi who died on Sunday last. Alas! how common are such and similar crimes—scarcely a day—never, I believe, a week, without something of the kind.¹⁰

What Elizabeth Colenso was suggesting and Colenso himself apparently affirming is that the lapse into immorality of Paul had led to God's retribution in the death of his niece Naomi and, after only a minor burn, the child Naaman from his own village. Again, on another occasion...

Te Paea ... informed me of the death of his newly-born child; upon which I reminded him of his shameful adultery, a few months back, with a near and newly-married relative of his....¹¹

It is a theme often repeated in Colenso's journals, perhaps most gleefully after the death by drowning of the great Chief Tiakitai and his crew.

...we heard of the loss of Tiakitai, his Son, and his party, 21 in number! who were on their way to Poverty Bay, in a large boat, to carry out his Heathen plans; and which voyage (on account of its object,) I had often protested & preached against.... It is somewhat remarkable, that all the Male Papist Heathens of Tiakitai's village were on board; and, among the rest, that

10 Colenso W. Journal 22 June 1847.

11 Colenso W. Journal 9 February 1848.

miserable white man, to whom Tiakitai sold a woman (shortly after our arrival here,) and whose cause he embraced to the end, in preference to the truth....

Early this morning the young Chief, Takamoana, his party and boat (who had sailed hence in company with Tiakitai's boat) returned from Te Wairoa, confirming the sad news. Takamoana spent an hour with me in my Study; he is very much cast down (in fact, his own life was saved almost by miracle), but acknowledged that Tiakitai deserved his fate—which is, also, generally allowed by the Natives. May GOD bless this awful visitation to the Chiefs, who are all hardened Heathens!¹²

And again...

*Among those who brought their children for Baptism was Isaiah Tamaeara from Te Rotoatara. This is the wizard with whom I conversed here 15 months ago, (see, Journal, Nov. 26/47,) and refused then to Baptize his child; since which (about 2 months ago) he had lost 2 of his 3 children in one day!—Both of whom suddenly died through eating the poisonous seeds of the fruit of the Tutu (*Coriaria sarmentosa*). I again questioned him as to his views, &c., and he now expressed his great willingness to abandon such practices for ever; acknowledging, that it was through his great wickedness he had lost his children, &c. He appeared now to be much humbled, and what he said was very suitable and affecting.¹³*

Goldsmith continued,

“The essential question is, how successful were his techniques? Not brilliantly.... The more serious medical problems were beyond Colenso’s grasp: oxide of zinc would not help whooping cough, emetic tartar would not heal influenza, calomel did not relieve marsh fever. He had no answer for consumption or scrofula.¹⁴

“When Colenso dwelt upon the fact that being a minister meant that one often soothed the dying, it was clear that therein lay his expertise and not in any attempts to avoid death.... Some of his medicine was of use; a lot may have had a placebo effect.”

12 Colenso W. Journal 9 February 1848.

13 Colenso W. Journal 10 March 1849.

14 Neither of course, did anybody else, including doctors.

WAS COLENZO'S MEDICINE UNORTHODOX?

No doubt the twentieth century brought the greatest advances in scientific medicine and therefore in rational, effective cures. And no doubt much of the medicine Colenso dispensed was, as Goldsmith suggests, ineffective. But was Colenso any different from others? was he out of line with nineteenth century medical orthodoxy?

Certainly the missionaries considered themselves to be medical practitioners: Colenso wrote of fellow missionary James Hamlin, "Mr Hamlin came from an old Station where he had been alone, consequently (he was) the Doctor of that place and neighbourhood, and, doubtless possessing many medicines, including Scales and weights, glasses, mortars, pallet knives, &c."

Two documents chart Colenso's training and early activities as a healer: an 1886 letter to the editor and an 1849 letter to the Church Missionary Society. They place his medicine well within accepted practice for the time.

On 8 December 1886 the *Hawke's Bay Herald* published a letter from William Colenso, reminiscing on his familiarity with Antimony as a medicine. The letter is important because among other things it provides insights into Colenso's capabilities and early experience. It reads,

Antimony

*"Eripit interdum, modo dat medicina salutem"*¹⁵

*SIR,—Much has been said of late respecting this drug; the papers have been repeatedly full of it; but, as far as I have seen, it has only been mentioned with disapproval, almost amounting to horror, as a virulent "poison;" not a word said in its defence, or to show its great use and beneficial service in medicine,—in skilful and cautious hands.*¹⁶

For some time I have thought of writing a few words to the Press on this subject; if only to remove from the public mind the general impression—of Antimony being only a "poison," and of very doubtful use in medicine. Of course, this common belief is now strengthened through the modern prohibitory law respecting its sale

¹⁵ "Medicine sometimes destroys health, sometimes restores it"—Ovid.

¹⁶ From mid-August 1886 the newspapers were full of reports of the sensational trial of Thomas Hall (the son of a former Prime Minister) and a young nurse named Houston, who were accused of poisoning Hall's wife with antimony in Timaru. Hall was found guilty (the jury took seven minutes) of the attempted murder of his wife and guilty (but acquitted on appeal) of the murder of his wife's father (whose body was exhumed and found to contain antimony). Houston was acquitted. See Fig. 1.

by Druggists: as well as by the manner it has been of late (for the last two mouths) spoken of in the papers; including the statements of Medical and other professionals in our Law Courts respecting it:—not one word (as far as I can learn) having been said in its lawful defence and support.

I know very well that in my writing on this subject I shall lay myself open to the charge of being an intruder,—perhaps a quack, or charlatan! but now, as before, I speak only of what I know.

And here, I think, a sagacious saying of our celebrated Englishman Locke, may not inaptly be adduced:— “Were it my business to understand physic, would not the safer way be to consult Nature herself in the history of diseases and their cures, than espouse the principles of the dogmatists, methodists, or chymists?”—¹⁷

Now it so happens, that I myself have had pretty much to do with Antimony as medicine in its various preparations during my life; and that not only in prescribing and administering it to others, but in using it myself, and have found very great benefit from it on many occasions. A few of the more prominent cases I will mention.

When very young (a growing schoolboy) I was long subject to an internal disorder; doctors and their remedies were tried, also the nostrums of old women (never in those days despised in country places), and also some of those other nostrums painfully collected and published by Rev. John Wesley in his book of “Primitive Physic,” (which, at that period, 60–70 years ago, was in high repute, especially in Cornwall)¹⁸—all, however, proved to be of little if any service. About

17 Locke was a medical doctor: “... ignorance with an indifference for truth is nearer to it than opinion with ungrounded inclination, which is the great source of error; and they are more in danger to go out of the way who are marching under the conduct of a guide that it is a hundred to one will mislead them, than he that has not yet taken a step and is likelier to be prevailed on to enquire after the right way.... For example, were it my business to understand physic, would not the safer and readier way be to consult nature herself and inform myself in the history of diseases and their cures, than, espousing the principles of the dogmatists, methodists or chemists?” (*An Essay Concerning Human Understanding*. Section 35. 1689). These were different groups of doctors—“dogmatists” made deductions from *a priori* principles rather than from observation and experiment; “methodists” believed health was a balance between tension and relaxation; “chemists” used drugs. Locke seems often to be misinterpreted as defending so-called “natural” medicine; in fact he is saying, go to the original sources; don’t trust others’ interpretations.

18 John Wesley 1747. *Primitive Physick, or An Easy and Natural Method of Curing Most Diseases* (see Fig.2). Wesley founded the Methodist religious movement and his medical ideas match his religious ones—rejecting the authority of the priesthood in favour of scripture, and

that time a Danish Doctor (said to be the physician to the King of Denmark) came over to the much warmer climate of Mount's Bay to spend the winter, on account of his health, he being consumptive, and I soon became one of his patients; and after taking his medicines, undergoing operation, and suffering much (all to no purpose), I left him. At this time I was advancing towards manhood (in my teens!) and I began to study Medicine a little, having the opportunity of so doing;—for I was early intended for the Medical profession, owing to our esteemed family Doctor being one of my godfathers.¹⁹ Among other strong medicines that I prescribed for myself, for my obstinate internal complaint, I may here briefly notice Sulphuric Acid; and this not merely the diluted article of the Pharmacopœia, but the stronger raw article of commerce,—which, of course, I diluted in my own way, but was always obliged to suck it up through a glass tube, and this did me some real service. After a while, however, I took Antimony, (the very notorious and much-abused Tartarised Antimony, or Emetic Tartar of the present time!) and of this drug I have taken as much a 2 grains, and on occasion 2½ grains, at a dose; and from this medicine I derived very great benefit.

of the medical priesthood in favour of nature and natural remedies. We should understand the Bible through personal experience and we should understand effective medicine through direct experience of natural treatments. His book emphasises cures readily available to most—honey for bee stings and, most delightfully, holding a puppy against the stomach as a cure for stomach pains. Nettles, cinnamon and onion for the first aid kit; prunes, lemonade and liquorice; cold water baths for almost everything, including consumption. If that didn't work he advised patents to drink nothing but water and eat nothing but white bread. If that failed, drink milk and sugar candy, or boiled sorrel. Then try milk and beer, ivy leaves, ginger, or even breathing the smell of fresh cut turf. Frankincense next, or beeswax, honey and water cress. (<http://www.quackometer.net/blog/2009/11/john-wesley-and-origins-of-natural.html>).

19 “... *our esteemed family Doctor being one of my godfathers.*” Colenso family historian Ann Collins thinks the most likely contender was Henry Penneck MD (1762–1834) who was the son of the Vicar of Paul and a descendant of an old Cornish family. He was a surgeon, apothecary and man midwife in Penzance. In those days his only remuneration came from the physic he supplied and he was sometimes accused of selling his patients more medicine than they required. His 1804 correspondence with James Sowerby is recorded in *English Botany*. He was an associate member of the Linnaean Society from 1805. In 1814 he was a foundation member of the Royal Geological Society of Cornwall. In 1827 *the Lancet* published his paper “Observations on Dislocations of the Thumb”; (*The Lancet* 9 (220): 260–262). In 1831 S. Highley published Penneck’s 40 page book *An Essay on the Nature and Treatment of the Indian Pestilence, Commonly Called Cholera* (in it he advocated bleeding from the head, mercury fumigations and bandaging the abdomen—this followed an epidemic in Newlyn that took over 90 people, so evidently was not a successful cure). In 1832 *The Lancet* published his “Treatment of the Malignant Cholera” (*The Lancet* 19 (477): 108-110). Penneck died in 1834, the year Colenso left for New Zealand.

So much for my early experience.

In coming to Hawke's Bay to reside in 1844, I brought with me a large and varied assortment of useful Medicines obtained from Apothecaries Hall.²⁰ And, as may be readily supposed, I had plenty of gratuitous practice! (I may here mention that for several years from the year 1835 I was in sole charge of the Church Missionary Surgery at Paihia, in the Bay of Islands; there being at that early period no resident Surgeon in the Bay, or indeed, in all New Zealand.)²¹

In 1846, the first visitation of Influenza appeared among us here in Hawke's Bay; and it was a sad time! for the epidemic was very severe and protracted. Now, then, was again seen the great benefits from the judicious use of Antimony (Em. Tartar). I had a large household, including Maori domestics, boys and girls; and my common practice was, during the raging of that Epidemic—first, to weigh out every morning 6 grains of Antimony, and dissolving this in a large bowl of water, to place it on a table in the hall, with a table-spoon and a dessert-spoon by its side; and of this we, all hands (sufferers from influenza) took a spoonful every 3 hours; and this use of it was kept up for several days. I proved this to be exceedingly beneficial in most cases, including my own self and family; in all, I may say, where the seat of the disorder was more especially confined to the chest.

20 Apothecaries Hall, Pilgrim St. Blackfriars (Fig. 3). Colenso listed the family possessions shipped to Hawke's Bay (St George IM 2012. The Colenso household goods in 1844. *eColenso* 3 (7)). Included are "Case Medicines from England... Box Medicine Bottles (oral ones)... Empty Vials, Med. Scales, Buchan, &c., Ointments... Cask Epsom salts" etc.

21 "William Williams was ... until the arrival of Samuel Ford, the mission doctor. Although he was modest about his qualifications, he had completed his apprenticeship to a surgeon, and had attended anatomical lectures at Oxford. While waiting for a passage to New Zealand, he had walked the London hospitals. He was able to cope with childbirth—as were most of the male missionaries—set broken limbs, and treat the minor ailments of the mission and Maori families. Against the mass invasion of whooping cough, influenza and scrofula, he was powerless, but conscientiously visited sick Maoris and gave what succour he could. Medical treatment for such illnesses generally consisted of doses of epsom salts and the application of 'blisters'. Cupping was often used for what was referred to as 'disorders'. There is no evidence to suggest that he vaccinated any of the Bay of Islands' Maoris, though this became missionary practice during the forties." (Porter F. (ed.) 1974. *The Turanga Journals 1840–1850. Letters and journals of William and Jane Williams Missionaries to Poverty Bay*. Victoria University Press, Wellington, p.33). William Williams was thus the mission doctor from his arrival in 1826 till the arrival of Dr Ford. Samuel Hayward Ford c. 1811–1876, Licentiate of the Society of Apothecaries 1832, Member of the Royal College of Surgeons 1833, volunteered as a medical missionary with the Church Missionary Society and arrived at Paihia Mission Station in 1837 and left in 1842. Colenso arrived at the end of 1834 and left in 1844. Colenso moved from Baker's to William Williams' house in 1835.

And this practice I always carefully followed, in succeeding years in my own house, whenever influenza appeared.

In cases of Croup I have also found Antimony to be a most beneficial medicine; as well as in certain cases of Indigestion, Biliary Complaints, and severe chronic maladies. Used outwardly as an Ointment I have also proved it to be great service in Hooping Cough, severe swellings, &c.—I believe that the celebrated Dr Jenner was the first to recommend the use of it in this way²³. For my own part I consider Tartarised Antimony to be the best and most useful of all the Antimonial preparations, because it is so easily managed.

In all chronic disorders where it is likely to be of service, its use must be continued for a long time. I never heard (until of late) of its administration in minute doses being considered by physicians of eminence as poisonous. When taken in large doses, of course, it acts as an active corrosive poison; but even then its symptoms are immediately produced and well-known.

I could say a great deal more on this head, but I forbear. At present I merely give you a little of my own experience.—I am, &c.,²⁴

WILLIAM COLENZO.

Napier, December 4th, 1886.

A second document provides further insights into Colenso's medicine. In 1849 he wrote to the Church Missionary Society secretaries in London.²⁵ The local missionary committee (Eastern Districts Committee) had questioned Colenso's account for supplies—among them medical supplies—for his Ahuriri Mission.²⁶ He quotes the decision of the local committee, then comments...

²³ Edward Jenner devised a new method for preparing tartar emetic while working with John Hunter (Jenner E 1783. *Cursory observations on emetic tartar; wherein is pointed out an improved method of preparing essence of antimony, by a solution of emetic tartar in wine.* Wotton-Under-Edge: Printed by J. Bence, bookseller and stationer). Tartar emetic was used commonly for many illnesses, but I can find no reference to Jenner's first using it for whooping cough.

²⁴ Antimony was an ingredient of printers ink and was added to lead to harden type. Possibly some of Colenso's own symptoms may have resulted from chronic antimonial poisoning, common enough in printers in those years.

²⁵ Colenso to CMS secretaries 28 February 1849.

²⁶ He wrote a note to accompany his original invoice in 1846: "The Medicines were had from Hudson and Son; their Bill amounted to £24.13.1, which, with 13½ pr. cent, paid to CMS., will be £27.14.8, from which is to be deducted £8., for a few medicines spared to Mr. Ford, and for Nutmegs, &c, for private use. The Medicines were never used until I came to Ahuriri,

“Medicines had been provided for the Ahuriri Station, as well as that at Te Wairoa by the Commee.; but the Medicines of which Mr. Colenso speaks were sent for without any reference to the Commee. Several Members of the Mission, both in the Northern and Middle Districts, have sent for Medicine Chests which they have paid for on private account.”—²⁷

Let me examine this:—

1. “Medicines had been provided for the Ahuriri Station, as well as for that at Te Wairoa”:—

Granted:—but, (as I said before,)—

α. Mr Hamlin came from an old Station where he had been alone, consequently the Doctor of that place and neighbourhood, and, doubtless possessing many medicines, including Scales and weights, glasses, mortars, pallet knives, &c.—²⁸

β. Annexed is a list of all the Medicines which I received on board our vessel from the Archdeacon while at Turanga; copied, verbatim, from the Archdeacon’s letter.²⁹ Surely I need not point out what are required in addition to them.

γ. It may, however, be here remarked, “That I was known to have a tolerably good assortment, if not stock, of Medicines, when residing at Paihia”:—Granted:—but, 1. before the arrival of Mr. Ford, as Surgeon, I had the whole Surgery in my house and under my Care; but on his arrival he took away every thing,—and,

2. Afterwards I obtained some more from the Kerikeri Store, in common with Archd. Williams and Mr. Baker, (before Mr. Baker’s removal to the substation at the Waikare,) but on Mr. Ford’s resigning his Situation as Surgeon, the Natives

and have been made (thro’ GOD’S mercy) a blessing to hundreds, *as well as to myself*. Indeed, it is mainly (under GOD) owing to the Medicines that we have stood our ground. Again, many other Medicines I have paid for out of my own pocket (now exhausted); and also for the Scales and weights, measures, &c, &c, &c.”

²⁷ see Fig. 4.

²⁸ The Colensos and Hamlins travelled together in 1844—James Hamlin to Wairoa and the Colensos to Hawke’s Bay. It was Colenso’s first station, but Hamlin had been in charge of two stations at Manukau, with headquarters at Awhitu, from 1836.

²⁹ Turanga = Gisborne. “List of Medicines for Rev. W. Colenso” Cream of Tartar. Chloride of Lime. Jalap. Rhubarb. Carb. of Soda. Sugar of Lead. Colocynth. White precipitate. Red ditto. Ant. Powder, Tartar Emetic, Quinine, Isinglass, (a *small* quantity of each). Ext. Conii. Ext. Hyoscyami. Calaminaris. Tile for making pills. Magnesia. Blister plaster. Salts—to be taken from Mr. Hamlin’s Cask. (Signed) W. Williams.”

*came as before to me for relief,³⁰ and there being no longer any Public Store to draw from, my little stock soon become exhausted. [Vide reports of those years, 1841, 1842, 1843.]*³¹

2. *“The medicines of which Mr. Colenso speaks were sent for without any reference to the Commee:—*

True:—

a. For how could I possibly have referred to the E.D. Commee. (or to any other Comee,) at the time of my sending for those Medicines? They being sent for, through the C.M.S., (in common with many Stores of a Public nature,) in July 1842. (Hudson’s invoice is dated, Feb. 1843.) All of which things were ordered, prospectively—believing that I should soon be sent somewhere to the South, and knowing that I had no Public Store to draw from. (Which benefit, be it remembered all my brethren had who preceded me.)

β. Yet, they were not wholly selected nor sent for upon my own unprofessional responsibility; Mr. Ford, then our Surgeon, well-knowing what I required both for myself and for the Natives, kindly guided me in this matter; for which I still feel grateful.—

3. *“Several members of the Mission, both in the Northern & Middle Districts, have sent for Medicine Chests, which they have paid for on private accounts.”*

Very true, indeed; and very proper too.—

(and I know some of the persons alluded to;) but, there is a wonderful difference between the two Cases. They sent for Medicine Chests—elegantly fitted-up articles—principally, because they were portable, & retained the Medicines in

30 Thus medical care at Paihia appears to have been provided as follows...

1826–1835: Williams was mission doctor, working from his large stone house at Paihia until...

1835–1837: Williams at Waimate, his old home (and therefore surgery) now occupied by Colenso, who referred to his new home as ‘Bachelor’s Hall’. Colenso provided care to the Paihia people until...

1837–1842: SH Ford mission doctor, took away all medical supplies in 1837, but Colenso, Williams and Baker obtained a supply from the Kerikeri store. Ford left in 1842.

1842–1844: Māori came to Colenso for relief “as before”—ie, “in 1835–37”.

31 Colenso’s reports to the CMS for 1841–1843 are lost. He referred to this period in his 1888 *Fifty years ago in New Zealand; a commemoration; a Jubilee paper; a retrospect; a plain and true story*. (Napier, R.C. Harding), when he wrote, “I alone had the charge of the Surgery, the attending to patients, and the making-up and issuing of Medicines; occasionally informing Rev. W. Williams of severe and peculiar cases for my guidance.”

nicely-stopped vessels, &c.; not because they needed the Medicines which those Chests contained. And that (I recollect) was one of the principal reasons urged in a Commee. against the C.M.S. paying for one of those so-ordered “Medicine Chests”; because the party had those very Medicines already by him.—

I believe I may be allowed to say:—

—That, from the very circumstance of my being farther off—not only from Medical aid, but, also, from civilized man, than any of my brethren in N. Zealand—some extra-latitude should have been allowed me.

—That from the circumstances of my being placed, in, perhaps, a more unhealthy situation than some of my brethren; and, unlike them, without any other European resident to whom any of the sick Natives might occasionally apply—with a more extensive charge—some consideration should have been shown me.—

—That from the circumstance of my never having (during the years in which I have been in the employ of the C.M.S.) cost the Society any actual outlay for myself, wife, or children, for Medicine, or Medical aid,—together with the known fact, that in the several serious illnesses with which it has pleased GOD to visit me since my residence here, those, very medicines have been (humanly speaking) the means of rescuing me from the brink of the grave—I can not but think the E.D. Comee. should have paused, ere they, in May, 1847, after my recovery from several attacks of serious illness,) deliberately entered such a Minute concerning a few Medicines....

3. “Medicines”.—*When I sent in my Returns, &c., to the E.D. Comee. in Decr. last, I, also, sent a List of a few Medicines wanted for the Station (a copy of which I enclose). I have just got a letter from the Archdeacon, in which he says— “By the “Clara” recently from England, the Society has repeated the shipment which came by the “Louisa Campbell,” supposing the former supplies were lost. There is therefore for you a repetition of the Medicines, and under these circumstances we are not able to make out an Indent for Medicines, having more now than we can pay for.”—Now, all this is very good, but what am I to do for those Medicines which I so much need? The Rhubarb and the Jalap, the Carbonate of Soda and Cream of Tartar, the Spanish Juice and the Calaminaris, will not stand in stead of the Calomel & Blue Pill, the Antimonial powder and Opium, the Sulphate & Hyd of Zinc, the Quinine & Emetic Tartar. These Medicines, my dear Sirs, (allow me respectfully to say,) I must have, if I am to be kept at this place; and that too with as little delay as possible. Here, where, twice a year, we are subject to epidemical visitations of Influenza, to be without a grain of Tartar Emetic? Where*

Marsh Fevers—of almost a Typhoid character—never fail both in spring and autumn, to be without Calomel, Quinine, Antimonial powder and opium? Where Ophthalmia is common, without a grain of Sulphate of Zinc for a wash? Where the Hooping Cough has raged, and not to have a fraction of oxyd. of Zinc? oh! I would that I was well rid of this dispensing work, but as long as I have it to attend to I must do my best. Of course, in saying (ante) “I must have those Medicines”, I shall be understood to mean, that if the C.M.S. cannot allow them, I must even be content to pay for them myself. I will, therefore, thank you to let me have the enclosed order executed and sent out as quickly as possible, viâ Wellington.

Colenso, whose maternal grandfather had given harbour to the early Wesleyan preachers,³² and who himself joined the Wesleyan chapel in Penzance as a teenager, readily adopted Wesley’s medical advice: use “natural” (i.e., simple, traditional, easily obtained) cures and trust your own experience. When he sailed from England in 1834 he had taken 128 books with him to New Zealand, two of them medical: “Buchans Medicine”³³ and “Alphabet of Botany”.³⁴ Both of these books follow Wesley’s iconoclastic ideas and would have appealed to Colenso.

But he had had some orthodox medical education in Penzance with Dr Penneck, and he took the advice of the surgically-trained Mr Ford in ordering the medicines he might require at Ahuriri. Later, on visits to Wellington, he would spend time with Dr John Patrick Fitzgerald and mix medicines for him.³⁵

32 Colenso to Harding 19 March 1891.

33 William Buchan (1729–1805) was a Scottish doctor who, in 1769 (22 years after Wesley’s book), produced the first edition of one of the most popular medical books ever published. Buchan was critical of doctors for making a mystery of their art and his book, *Domestic Medicine; or a Treatise on the Prevention and Cure of Diseases, by Regimen and Simple Medicines* (see Fig. 5), was directed to the lay public, with practical advice on preserving health and treating common ailments using easily obtained medical preparations. Buchan’s advocacy of self-help, simple treatments, plain diet, hygiene and temperance struck a chord with the public and it was said the two books to be found in every Scottish croft were Buchan and the Bible. The book became an instant best seller, ran to 21 editions in Britain and Ireland and remained in print for more than 90 years.

34 More up-to-date: James Rennie’s (1787–1867) *Alphabet of Medical Botany, for the Use of Beginners* (see Fig. 6) was published in 1834, the year of Colenso’s departure for New Zealand. Rennie was a Scottish naturalist, professor of natural history and zoology at King’s College 1830–1834. He wrote a number of books titled “Alphabet of . . . for the use of beginners” (including in 1833 a nonmedical botany text, which may have been the one Colenso took with him) and emigrated to Australia in 1840.

35 Colenso W. Journal 20 June 1848. Earlier he had written, “I visited the Native Hospital; here were several Natives whom I knew, and who were glad to see me. This place is in nice order,

TRUST YOUR OWN EXPERIENCE: COLENZO'S CONDITIONS³⁶

Colenso wrote freely about his physical illnesses, but as a missionary he was a fit young man who covered more ground on foot than any New Zealand explorer before him. He was susceptible to winter viruses (influenza—"la grippe" was epidemic annually), complicated by "bronchitis" (possibly bronchiectasis after his whooping cough in 1848), and (in later life in 1891–2) by a weakness of his legs³⁷ that suggests Guillain-Barré syndrome (though one wonders if some of his weakness was self-induced by the hemlock in his remedies).³⁸

He was a lifelong sufferer from trigeminal neuralgia, the symptoms first mentioned in his letters to the CMS. Colenso gave a good description, "...I was ½ mad with Neuralgia (Rheumatism in ear, temple, & jaw, & there only *all the time*,)—which began a week before I went inland, & still continues—I had but *one* night's sound sleep all the 3 weeks I was absent: Oh! it was misery, misery, and no relief."³⁹

He was desperate, and, attaching an advertisement he had clipped from one of the London papers for "Neuraline", he wrote, "I enclose an advt.; could you get me a bottle, & put it into a tin box in cotton, & send it:—of course I will pay *all* expenses."⁴⁰ (See Figs 7 to 9).

Neuraline was made by Leath & Ross, who sold homeopathic medicines and books (and mahogany medicine chests). This, however, did contain an active ingredient: tincture of aconite; it was meant to be painted onto the skin.

As with many "natural" remedies today, it was unregulated and toxic. All parts of aconite (Monkshood, *Aconitum napellus*) are poisonous. "A liquid sold for external use under the name of Neuraline appears to be a preparation of tincture of aconite mixed with chloroform and rose-water.... It operates by causing numbness or

being under the care of Dr. Fitzgerald, (one of the best Papists I have ever known) who seems really to *love* the New Zealanders—a rare instance in a white man!" (Journal, 30 October 1847). A brief biography of Fitzgerald can be found at <http://www.teara.govt.nz/en/biographies/1f10/1>.

³⁶ Updated from St George IM. *Colenso's collections*. NZ Native Orchid Group, Wellington 2008.

³⁷ Colenso to JD Hooker 17 May 1892.

³⁸ Colenso to JD Hooker 5 January 1856.

³⁹ Colenso to Andrew Luff 5 May 1875.

⁴⁰ Colenso to Andrew Luff 25 Aug 1875.

paralysis of the parts to which it is applied. The death of the Hon. G. R. Vernon was ascribed to the too frequent use of this preparation externally.”⁴¹

A number of deaths were reported after people mistook the application for an oral medicine and drank the stuff. Even more deaths from aconite poisoning followed the mistaken use of monkshood roots for horseradish sauce.

Neuraline bottles are collectors’ items now—one sold recently on eBay for \$100.

If Colenso did use it, it clearly did not provide a permanent cure—he wrote again in 1889: “... neuralgia of face and jaws &c.—sometimes *nearly wild* with pain....”⁴²

He complained repeatedly of “rheumatics” (an imprecise term then for almost any musculoskeletal disorder) and lumbago, possibly simply the painful osteoarthritic and degenerative conditions that reward a lifetime of long walks⁴⁴ and hard physical work, but more likely an inflammatory arthritis, for even at age 37 he complained of being “laid aside with severe Rheumatism for 3 weeks in December.”⁴⁵ In 1885 at Woodville he was so crippled he had to take a cab to and from church.⁴⁶ Again, in 1893 he wrote, “... at times very bad, especially in feet, soles & toes, so that sometimes I can scarcely walk at all—& very painful, but *only* while walking,”⁴⁷ suggesting an inflammatory arthritis involving the small joints of his feet.

He gave a strong indication of the cause in a letter to Hector, “I regret to say that my hand has been very much affected for more than a month—so that I could scarcely write my name!.... I sometimes think it must be an anomalous phase of gout—to which my father was a long martyr!—and which I had regularly some 25 years ago.”⁴⁸

I am sure he was right, that he had an hereditary tendency and suffered acute gout as well as chronic gouty arthropathy. His frequent attacks of diarrhoea may have been caused by colchicine, the standard treatment for gout even then.

41 Alfred Swaine Taylor 1875. On poisons in relation to medical jurisprudence and medicine. *Pharm. Jour.*, Jan., G18. p94.

42 Colenso to Andrew Luff 12 Apr 1889.

44 He rode a horse only on his school inspections to Central Hawke’s Bay after the missionary years.

45 Colenso to WJ Hooker 31 January 1848.

46 Colenso to JD Hooker 24 January 1885. Was he overdosing with his hemlock concoction? see 5 January 1866 letter and footnote 236, *Colenso’s collections*.

47 Colenso to JD Hooker 24 January 1893.

48 Colenso to James Hector 26 May 1870. Museum of New Zealand Te Papa Tongarewa MU000147/003/0107.

He wrote of being unable to use his right thumb in 1863–5, but gave no explanation other than “For 2–3 months past I have had a peculiar affn. of right hand—scarcely write at times.” In 1866 either acute gout or septic arthritis of his right forefinger was complicated by ankylosis of the joints, so that he had to relearn to write:

“In Aug. /66 I was suddenly attacked with malignant Whitlow (or something worse) in bulbous part of forefinger right hand. For 6 days & nights I was nearly mad and eventually became delirious; I begged & prayed our surgeons day after day to lay it open—they would not, saying they could not see where to cut (it was red swollen & stiff throughout), but on the 6th day, when I was beside myself and the disorder up to my elbow, they did so—it gave immediate relief but I have lost the use of my finger! I was months poulticing, &c, &c, and I got very low & haggard; and now my finger is healed rigid (anchylosis). I think I must have informed you, that I had lost the writing & drawing use of my right thumb 4 years ago, and now my index finger has followed suit; so I had to learn to write with my mid. & ring fingers....”⁴⁹

The 1868 photograph (Fig.10) portrays his right hand in what appears to be a rather affected or religious posture, but actually shows his rigid forefinger. This was not, as Bagnall and Petersen suggested, “writer’s cramp”.

He wrote to his old friend JD Hooker in 1885,

I am distressed in hearing of you, too, being subject to Lumbago. I sincerely hope you may never have it severely it is so obstinate, so painful on the least attempt at moving, which, in fact, one cannot do! and sometimes (out here) makes such lengthened unwelcomed visits – spinning out 3, 4, 5 weeks. I greatly dislike it, and guard against it (believing that “prevention is better than cure”) by (1) always wearing a silk bandage round middle; (2) never sitting down on a hollow or open back chair, at least not without throwing my cloak over it, which I usually carry on my arm for that purpose; (3) never stooping quickly to pick up any thing, not even in the woods, nor to poke the fire, &c., – to do this last I always go down like a camel on my knees; and (4) when I feel its approach, or fancy I do, I take an anodyne pill at night, – one of my own prescribing, of nearly 40 years standing, – of which I have taken 1000’s & also found relief; sometimes consecutively for 3–4–5 weeks.

49 Colenso to JD Hooker 14 November 1867.

*Here it is, Rx. Comp. Ipecac. pulv. iii drachms, Comp. Ext. Colocynth. vii grains, Sapo Cast. viii. grains. m. div. in pil. xxx.*⁵⁰ *I have never experienced the least injurious effect from them; some nights, owing to severity of pains, I have taken 2 as a dose. I may truly say, I am never a day without Rheumatic pains, but some I don't much care for now; although it is grievous, to stretch out one's arm for a book on table (when sitting writing at Dicty.), and to find I can not lift it without severe pain; so teapot, &c, &c, at times.*⁵¹

In late life he suffered paroxysms of palpitations, as he wrote to Hooker in 1898, “my heart has lately (during 2-4 months) bumped away at a terrible rate—not fast but loud & strongly, regular in its rhythm! but kicking-up such a row as almost to *stop* my reading or writing,—or even to my hearing the rain or the rustling of the leaves of the trees outside; such lasts about an hour, or less, then it subsides—goes to sleep! Some folks, I fancy, would be frightened at such erratic & abnormal movements and *visit a Doctor's Surgery!* May I ever be kept *from that!*”⁵²

Despite dwelling on his illnesses in his letters, Colenso only occasionally mentioned doctors, sometimes disdainfully. He was necessarily a self-medicator, his nearest doctor at Wellington and nearest Church of England missionary at Wairoa; his early years as a dispenser at Paihia taught him to make up his own medicines and he was not averse to endorsing a commercially popular remedy (Fig. 11).

He wrote to his friend David Balfour, “I am pretty (or very) well again. A great change with me, for the better took place on Sunday last, & yesterday, *electricity* clinched the nail. I have for 50 years been a great believer in electricity,—& am of the opinion, that future ages will make wondrous uses of it, & also find it a great curative power.”⁵³

MEDICAL PRACTICE IN COLENZO'S PARISH

The CMS required its missionaries to keep a journal and to report annually. Colenso's journals during his Paihia years are fragmentary but those relating the events of his 1844–1852 mission based at Waitangi are a rich source of information on many

⁵⁰ Compound Ipecacuanha powder (an emetic), compound extract of Colocynth (a strong laxative), *Sapo Cast* (a homeopathic “moderator”) together make up what must have been a rather unpleasant placebo.

⁵¹ Colenso to JD Hooker 14 October 1885.

⁵² Colenso to JD Hooker 8 February 1894.

⁵³ Colenso to David Balfour 30 November 1886. Hawke's Bay Museum and Art Gallery.

subjects, including his medical work in the vast area of his professional practice (see map Fig. 12).

Prevention

Smoking cessation

“To the end of his days he held spirits and tobacco in utter detestation,” wrote his great friend Robert Coupland Harding.⁵⁴

Colenso’s writing is full of evidence for his dislike of the fragrant weed. He disapproved of tobacco as an item of barter with Māori, dismayed at its addictive power. He wrote in 1846 to Dandeson Coates, complaining of his financial situation: “Other memoranda of Losses may be easily gathered—from my not keeping Tobacco to pay the Natives for provisions and labour supplied (as is almost every where done to their injury).”⁵⁵ The other missionaries paid for goods and services with tobacco. Creating addiction, then supplying the needs of addicts has always been a profitable undertaking.

He wrote in 1848,

*We travelled on till dark, when we halted for the night at Okiwi, in Port Nicholson harbor, among a little party of Native fishers. Observing a little girl, of scarcely 4 years!! lighting her pipe with all the sang-froid of an experienced smoker, I remonstrated with her parents; they laughingly replied, they could not control her! (their usual cry,) on which I went up and took away her pipe, when she pursued me with a flaming brand, which I also took away, and gave her a good whipping, which caused her to make a prodigious outcry.*⁵⁶

From a hut at Mangaroa on the Rimutaka Hill road, he wrote,

One of the whites begged of me, as a great favor, that I would speak to the Natives with me (8 in no.,) to give them a tobacco pipe, for their only one had that morning broken. And when I told him, that none of my Natives used tobacco, he was greatly surprised, which surprise increased, when he heard of their having all given up the practice at my request. In fact, he would scarcely credit me; saying he had never before heard of such a thing, nor seen

⁵⁴ Harding RC. William Colenso. Some personal reminiscences. *The Press* 27 February 1899.

⁵⁵ Colenso to CMS (Dandeson Coates) 20 June 1846.

⁵⁶ Colenso W. Journal 2 May 1848.

*(during his 5 years residence in New Zealand) a party of Natives who did not smoke: so very general has this filthy lazy practice become.*⁵⁷

He wrote later, that he was “Pleased to find, that, through my plain and faithful representations to them when at the School last winter, 15 persons (9 men & 6 women) of the valley of Wairarapa, had already left off Tobacco! These persons all inveterate smokers!!”⁵⁸—and again (1848), “During the year, upwards of 200 persons (Males & Females) in addition to the 44 mentioned in my report for 1847, have voluntarily given up the practice of smoking Tobacco.”⁵⁹

He wrote to the Secretaries at Church Mission House in London in 1852 that my great great grandfather Georg Kissling was biased against him “from my having often denounced his incessant & filthy German habit of smoking tobacco”.⁶⁰ In 1880 he wrote to the Committee of the Athenæum (*Hawke’s Bay Herald* 6 December) asking “that the morning hours should be allotted for the ladies and the non-smoking members”, which “the committee reasonably granted”.⁶¹ In 1883 to JD Hooker with specimens: “When you see so many Cigar boxes,—don’t run away w. the notion that I am become a smoker.”⁶²

In 1885 he wrote to the *Hawke’s Bay Herald* on the closure by teetotallers of country hotels,

Again:—as I lately put it to one of my Scandinavian acquaintances, who had donned the bit of Blue, and who is a religiously-disposed man:— “You smoke, I think?” “Yes, I do;” was the reply. “Well,” I rejoined, “I don’t, and I do not like tobacco; and I believe, with many others, that tobacco is much more hurtful to our rising generation than strong drink. Suppose we (my party) were to combine, and not caring for the comfort and requirements of the larger number or our fellow-men, were to get a law passed prohibiting the use of tobacco; How would you like that?” “Oh! not at all,” he replied “that would never do; that would be very unfair; we would not submit to it; in fact we

⁵⁷ Colenso W. Journal 4 November 1847.

⁵⁸ Colenso W. Journal 14 November 1847.

⁵⁹ Colenso W. Report to CMS for 12 months ending December 31, 1848.

⁶⁰ Colenso to CMS secretaries 4 December 1852

⁶¹ Colenso W 1880. The Athenæum’s last committee meeting. *Hawke’s Bay Herald*, 6 December.

⁶² Colenso to JD Hooker 30 June 1883.

*could not live without tobacco.” “Ah! yes,” I said, “that will do; I have it from your own mouth. And you are a Christian! a follower of Him whose principal tenet was,— ‘Do unto others as you would have them do unto you.’ ”—
Now, just so, as I take it, is it with a man who needs his glass of Beer, or of Wine, or of Spirits....⁶³*

Then this from an older, wiser, more moderate man, in his letter “Teetotalism and temperance” to the *Hawke’s Bay Herald* in 1888,

To me, the intemperate man is to be found in two distinct classes, or companies, in that one regiment:—1. The drunkard, the glutton, the inveterate smoker, the immoderate in dress and vain body ornaments, in pleasures, and in idleness and frivolity, in gossip and low unprofitable talk:—and 2. the total abstainer from the good things that the Great and Good Father of all hath given to man for his use and comfort, with His blessing on man’s progressive improvement in their manufacture, and in his proper use of them. Whether Teetotaller or Vegetarian, anti-tobacconist and antivivisectionist, ascetic or fanatic of any kind,—all alike belong to this class: each with an ill-directed zeal acrimoniously (and too frequently dishonestly) seeking to bring mankind into his own narrowminded way, and looking scornfully on all the rest as being “in the broad way of destruction,” if not already “lost”!⁶⁴

Any excess of fervour—zeal, passion or fanaticism—is as bad as intemperate consumption.

To his disappointment his darling son Wiremu smoked:⁶⁵

*As to your “Indigestion”: I am pretty sure it is to be placed to 2–3 things:—
1. want of sufficient good exercise: 2. too great use of tobacco: 3. and (perhaps) tea, or coffee, or bacon & eggs, or some food—pastry, pancakes, ‘taty-cake,’ “sweets,” disagreeing with you, try to find it out yourself and don’t go to Doctors, neither be taking medicine now & then.*

Sound advice then, as it is now.

⁶³ Colenso W. 1885. The hotel question at Makatoku. *Hawke’s Bay Herald*, 21 May.

⁶⁴ Colenso W. 1888. Teetotalism and temperance. *Hawke’s Bay Herald*, 29 June.

⁶⁵ Colenso to Wiremu Colenso 9 September 1893.

Vaccination

I can find only two references to smallpox vaccination, the first is a journal entry for 16 December 1847, “Morning, vaccinated a few Natives....”

The second is in a postscript to a letter to Donald McLean in 1851,

*P.S. I have lately heard (from Whites) of the Small Pox having arrived in N.Z., & now committing fearful ravages at E. Cape. Pray get me some vaccine virus, that I may do all I can for the infants and others here who are not vaccinated. I have at different times vaccinated a large number, but there are still hundreds who have not been done. If you can, pray get it from two sources; & send immediate. It is a national good, & one which I am willing to perform gratis.*⁶⁶

Epidemiology⁶⁷

In May 1857 Colenso wrote to the Hawke’s Bay Superintendent who was planning a road through the Forty Mile Bush, along Māori tracks that Colenso had repeatedly walked on his return to Napier after making his visits to Wellington. Bishop Selwyn had required him to furnish a population census of the villages in his region, so he was able to provide numbers to back his arguments against the planned route through low-lying and unhealthy country; he related the sad decline of the Ngatitutaiaaroa in support of his position.

The Ngatitutaiaaroa tribe of Natives, who, for several years (i.e. from 1846,) dwelt at Te Hawera⁶⁸, lived, before that time, at a village called Ihuraua⁶⁹—a place about 14 miles distant in a N.E. direction through the forests from Te Hawera, but situate on very much higher ground.—

This truly isolated little party (many of whom had never before seen a white man,) proposed to me, on our second meeting, in 1846, to remove their dwelling to Te Hawera, if I would regularly visit them (in common with the other Native villages of the District), as, by their so doing, they would save me several additional miles

⁶⁶ Colenso to McLean 1 August 1851. ATL Object #1011726 from MS-Papers-0032-0221.

⁶⁷ Reprinted from *New Zealand Doctor*.

⁶⁸ “Te Hawera” = modern Hamua, on the Woodville-Masterton highway, north of Ekatahuna. The name “Hawera” is still preserved in the district.

⁶⁹ “Ihuraua” Stream flows past Alfredton, 16 miles by road east of Ekatahuna. Colenso never visited the village.

of heavy forest travelling up and down on the same line. So that, instead of returning to Hawke's Bay from the village near the head of the Wairarapa valley (Te Kaikokirikiri)⁷⁰ via Whareama and the Coast, as hitherto, I should henceforth travel towards Te Hawera and Ngaawapurua⁷¹ over pretty nearly the present track; which, at first, was particularly heavy owing to the (then) trackless state of the forest, as well as the open Fern Lands at the head of the Wairarapa valley; a journey which (from Te Hawera to Te Kaikokirikiri) invariably took, at first, in fine weather and no floods, three long and toilsome days.

On their removal to Te Hawera, in 1846, I noted down the names and number of the tribe; which amounted to, men 25: wom. 20: childn. 6 = 51.

The whole party settled quietly down; built their huts, and also a little rustic chapel; cultivated different spots of the forests around; and, in the course of two or three years, had all professed the Christian Faith. They rarely visited, and when they did only went to the nearest villages—Mataikona (E. Coast), Te Kaikokirikiri (Wairarapa), and Ngaawapurua (Manawatu).

This little simple and wholly isolated party had a large share of my attention; as, at first, I had sanguine hopes, of their becoming an increasingly pleasing community.—

From several of the Native Xn. teachers of this District (whom I often sent to visit them), they had also much attention: Te Hawera village was altogether No. 1, in our estimation.—

At that early time (1846) I knew nothing of the truly deadly nature of the site they had chosen. The Lands thereabouts were their own, and I could not but suppose that they were the best judges in such matters.—

Finding, however, that several deaths had invariably occurred between every interval of my visiting: that their disorders were constantly of one, or two, types,—Fever, both intermittent and Rheumatic, and Pulmonary Consumption: that the living were greatly altered in appearance, although largely possessed of good food, both animal and vegetable: and, that the floors of their huts were always more or less damp; and, also, having, by this time, both noticed and experienced what I have already written, I began to suspect the true cause of their ailments, and

70 “Te Kaikokirikiri” = modern Masterton: the village site is on what is now the Masterton golf course.

71 “Ngawapurua” is located on the north bank of the Manawatu River immediately to the east of the junction with the Mangatainoka (of Tui Beer fame).

earnestly urged their speedy removal to some better (higher and more open) Site; this, however, I could not now effect. They would not (or, rather, could not,) believe their daily lessening number was caused by the unhealthiness of the spot; but (wholly in accordance with N.Z. ideas) by the malediction and enchantments of their old enemies because they had received the Xn. Faith: which Faith, however, they would never abandon, and consequently (reasoning as New Zealanders) the first little Chapel of their Tribe, and their dead relations who lay buried around it.—The end is soon told: up to May, 1851, the number of deaths of this small party (including their principal man then lately deceased), amounted to men, 14: wom. 14: childn. 4 = 32 and the sorrowing remnant were then, at length, yielding to my advice, (or, more properly speaking, commands,) and were about to depart for the open country in the lower Manawatu. In March, 1852, (when I last went that way,) one of the tribe had come from their new place of abode to meet me at Te Hawera; who informed me, that, before that they had left the place, another male had died, making a gross total of 33 (thirty three) out of 51 (fifty one) in the space of 5 (five years)! several of whom were young, both of males and females.

The number of births during the same period was only six, of which, four had also subsequently died.—

The resting-place of a number of these dead, is strikingly indicated in the Chief Surveyor's Sketch Survey, as "Graves"—in the little Fern oasis of Te Hawera.—

The rude little chapel of this people, being the last house built, had been erected on much higher grounds, at some little distance from their huts (and close to the present "graves"). There, although at least three feet higher, the ground had also been flooded.—

In time of floods the inhabitants used to escape to a high terrace on the edges of the forest a little beyond their chapel; where, indeed, they were safe, but quite cut off from all human aid.—

With hopes of alleviating their sad situation some of the party made a cultivation and erected houses on the river's bank at Pahiatua; from this, however, they were also driven by the floods, when they made another attempt upon a steep hill not far off.

At this last mentioned place my (then) principal N. Teacher from Ahuriri⁷² found a few of them with their chief, on a visit he made to Te Hawera, when, and only with great difficulty, he got so far as this place, but could not go any further....

Māori, like many indigenous peoples, were decimated by illnesses brought by colonisers, and though it is not entirely clear what destroyed this small community, it seems certain that pulmonary tuberculosis was at least partly to blame. But what were “Fever, both intermittent and Rheumatic”? The word “rheumatism” was used for almost any musculoskeletal pain, but was “Rheumatic fever” used more specifically in 1847?

Sydenham described chorea in 1686. Rheumatism was associated with carditis in 1812. Sore throat was recognized as a precursor to rheumatic fever only in 1880, scarlet fever in the early 1900s, and it was not until 1944 that Jones compiled his diagnostic criteria.

Did Colenso’s reference to “fever... rheumatic” have the same meaning as “rheumatic fever” would now? were the Ngatitutaiaaroa all but wiped out as a consequence of that peculiarly Māori susceptibility?

Materia medica⁷³

The “List of Medicines for Rev. W. Colenso” approved by Archdeacon William Williams amounted to “Cream of Tartar. Chloride of Lime. Jalap. Rhubarb. Carb. of Soda. Sugar of Lead. Colocynth. White precipitate. Red ditto. Ant. Powder, Tartar Emetic, Quinine, Isinglass, (a *small* quantity of each). Ext. Conii. Ext. Hyoscyami. Calaminaris. Tile for making pills. Magnesia. Blister plaster. Salts.”

Cream of Tartar: “Bitartrate of Potassium. This is a cooling, mild purgative salt, which also increases the flow of urine (diuretic). It is very often given in **dropsy**. Dose, one or two teaspoonfuls, stirred in **water**.”

Chloride of Lime: “*Calx chlorata*, Chloride of lime is a stimulant, deodorizer, disinfectant, antiseptic and bleaching agent. In small doses it increases the action of the secreting organs, and if long continued it acts specifically upon the lymphatic glandular system, causing the reduction or absorption of glandular and other tumors.

⁷² “Ahuriri” = Napier.

⁷³ I have referred to *Encyclopedia Britannica* online and elsewhere for these explanations. Otherwise unattributed quotes are from <http://chestofbooks.com/health/materia-medica-drugs/>

In large doses it acts as an acro-narcotic poison, and its use should always be commenced in small doses, carefully increased, and discontinued when such symptoms as nausea, vomiting or giddiness appear. It is chiefly used as a disinfectant. Solutions of chlorinated lime are employed locally in scarlet fever, diphtheria, aphthae, gangrene; and it has been administered internally in scrofula, typhus, malignant scarlet fever, syphilis, etc.”

Jalap: “This is a very active purgative; too much so for common use, but sometimes valuable in particular cases. In dropsy it is occasionally prescribed, along with cream of tartar, or with **Squills**. I remember its excellent effect in a very bad case of scarlet fever, with **stupor** and constipation. Dose, ten to twenty **grains**.”

Rhubarb: “The root of an Asiatic and European plant, is a gentle purgative, with also some tonic property, which makes it especially adapted to dyspeptic persons, and others disposed to constipation. Dose, for such a use, from three to six or eight **grains**.”

Carb. of Soda: used variously for biliary colic (“Dr. Prout states that he has seen more immediate alleviation afforded by large draughts of hot water, containing the Carbonate of Soda in solution (3j. - 3ij. ad Aq. Oj.), than by any other means. The alkali counteracts the distressing symptoms produced by acidity of the stomach, while the hot water acts like a fomentation to the seat of pain. The first dose or two will be rejected, but it should be persevered in, and a few drops of Laudanum may be added if necessary.”), cholera, diarrhoea, vomiting of pregnancy, dry catarrh, neuralgia, and “acute rheumatism”.

Sugar of Lead: “Acetate of Lead is obtained by immersing lead in distilled vinegar. (It) is sedative and astringent, checking the secretions and reducing the activity of the capillary system, and diminishing the force and frequency of the pulse.”

Colocynth: “This drug belongs to the group of resinous anhydrides of the class of vegetable, drastic, or hydragogue cathartics. Following a good sized therapeutic dose of Colocynth, or a number of such, the following symptoms appear: persistent vomiting; profuse watery stools, perhaps bloody... intensely painful abdominal colic is an early effect; this is so acute and severe as to cause the recipient to bend double, as this posture affords some relief from the suffering. If the poison is not promptly eliminated, nephritis is established, a condition which is usually absent, owing to the free diarrhea.”

White precipitate: “Ointment of Ammoniated Mercury, or White Precipitate Ointment (*Unguentum Hydrargyri Ammoniaci*), made by rubbing a drachm of ammoniated mercury with twelve drachms of simple ointment, is used to destroy

pediculi, and as a stimulant alterative in indolent ulcers, Psorophthalmia, and various cutaneous eruptions, as scabies, chronic impetigo, and favus or scald-head.”

Red precipitate: “*Unguentum Hydrargyri Oxidi Rubri*, in consequence of its inequality of action, and occasional violence, the red oxide should not be used internally: if given, the dose should not exceed one-quarter or half a grain. At present it is used exclusively as an external remedy, for its locally alterative, stimulant, or escharotic effect, in syphilitic ulcers, in old indolent, flabby, or fungous ulcers whether syphilitic or not, in various cutaneous eruptions, and in different diseases of the eye or its appendages. It is used in the form of powder, ointment, or lotion.”

Ant. Powder: antimony powder: see Dr. James’ Fever Powder, below.

Tartar Emetic: antimony.

Quinine was the first antimalarial, but was used as a general antipyretic.

Isinglass is used to clarify liquids.

Ext. Conii. Conii folia, B.P. *Conium* or hemlock leaves have the disagreeable odour of mice, which is accentuated by the addition of solution of potassium hydroxide. *Succus Conii* was used internally for its sedative and antispasmodic properties. Externally, as *Unguentum Conii*, it was a soothing application to haemorrhoids and other painful or irritable conditions of the rectum and anus.

Ext. Hyoscyami: hyoscyamine, from henbane: antispasmodic, hypnotic, mild diuretic. The leaves have been employed as a narcotic medicine. It is similar in action to belladonna and stramonium, though milder. Was used for asthma, Parkinson’s disease and depression.

Calaminaris: calamine.

Tile for making pills: a specially grooved ceramic or porcelain tile.

Magnesia: a laxative since Hippocratic times.

Blister plaster: blisters were “employed principally with the intention of relieving the diseased condition of some internal organ, by producing a new irritation, or determination to the surface of the body, or, as it is usually termed, by counter irritation. Independently of this effect, blisters act also as general stimulants to the system, and as such are frequently employed with much benefit in spasmodic affections arising from debility” (*A Family Medicine Directory*, 1855).

Salts. Epsom salts, the most commonly used purgative.

Colenso sent the list in Fig. 13 to the Church Missionary Society in March 1849.

Calomel was mercurous chloride, a very heavy, soft, white, sweetish-tasting mineral. Once the most popular of laxatives, calomel has been used in medicine since the 16th century. The recognition of its toxicity led to a decline in its use in internal medicine. It is still used in insecticides and fungicides.

Quassia amara is a shrub native to Brazil. Its heartwood, the bitterwood or quassia, was ground and used to reduce fever.

The **Blue pill**, also called the *pilula hydrargyri*, was a remedy prescribed for various ailments, particularly constipation. It contained $\frac{1}{3}$ elemental mercury by weight, mixed with marshmallow, honey of rose, liquorice, glycerin, and inert ingredients to form pills of about 48 grains (3.1Gm). A combination of the blue pill, and a mixture called the common black draught, was a standard cure for constipation in early 19th century England and elsewhere (a big problem then, when flour was being refined).

Conii folia see above.

An ointment for mange and lice had this recipe: **oil of turpentine** 3 oz., oil of vitriol 1 oz.; mix cautiously, avoiding the fumes, and add melted lard 8 oz., train oil 4 oz., oil of turpentine 2 oz., flowers of sulphur or **sulphur vivum** 4 oz.; stir till cold; apply daily for 3 or 4 times, and give an alterative powder twice a day. Colenso's biggest order was for turps (2 gallons) and sulphur (10 pounds), confirming mange and lice were common.

Opium was used for any pain relief, including infants' teething.

Dover's powder was a traditional medicine against cold and fever: "Powder of Ipecacuanha and Opium: prepared ipecacuanha, 10 g., powdered opium 10 g., lactose 80 g."

Quinine see above.

Ipecacuanha has a long history of use as an emetic, for emptying the stomach in cases of poisoning. It has also been used as a nauseant, expectorant, and diaphoretic (to induce sweating), and was prescribed for conditions such as bronchitis. Dover's powder was a common preparation for this purpose.

John **Newberry** was a writer and bookseller who became well-known for publishing children's books. He also established *Lilliputian Magazine*, the first magazine for children, in 1751. He also owned **Dr. James' Fever Powder**, a very successful and popular health remedy containing antimony which made Newberry a fortune—but which has also been blamed for causing King George III's insanity. One of Newberry's children's books publicised the powder by having the character Little Goody Two-Shoes benefit from a dose. Since antimony was often contaminated with arsenic, the powder was also responsible for arsenical poisonings.

Potassium Sulphate is a fertiliser, also used to reduce muzzle flash in night fighting. You can however still find “New Era Kali. Sulph. (Potassium Sulphate) Tissue Salt (No. 7) 450s” online (£4.47 for 1), “a biochemic remedy for maintaining skin condition and skin eruptions with scaling or sticky emissions, falling hair, diseased nails and catarrh.”

Zinc sulphate was used as an astringent and emetic.

Zinc oxide: as a mixture with iron oxide is calamine. Fine particles have deodorizing and antibacterial action and for that reason are added into various materials including cotton fabric, rubber, food packaging, etc. Zinc oxide is widely used to treat a variety of skin conditions, in products such as baby powder and barrier creams to treat nappy rash, calamine cream, anti-dandruff shampoos, and antiseptic ointments. Zinc oxide can be used in ointments, creams, and lotions to protect against sunburn.

Wedgewood mortar: for pharmaceutical use, the mortar and the head of the pestle were usually made of porcelain, while the handle of the pestle was made of wood. This is known as a Wedgewood mortar and pestle and originated in 1779.

Colenso listed the goods saved from the disastrous house fire at the mission in January 1853, among others, those “*from the Surgery*;—(of Medicines in use & on the shelves—out of nearly 200 bottles and Jars, only,) scales and weights, 1 Bott. of Laudanum; 1 ditto Carb. Ammonia, 1 pot of opium, and a bottle of Sulphur—and a box of sundry medicines not in use:—.... Among the books destroyed in the fire I mourn particularly... Graham’s Domestic Medicine, ditto, on diseases of females.⁷⁴

Rev J Ralph wrote to the Church Missionary Society in 1853, ordering 75 different medicinal items for Otaki.⁷⁵ Most of Colenso’s items are there, but in Ralph’s list are many more flavouring agents—sweeteners which Colenso seems to have considered unnecessary for his patients.

Ineffective, nasty-tasting, poisonous or not, Colenso’s formulary represents orthodox midnineteenth century medication.

I can find no evidence that he used NZ plants in his medicines. As Gluckman pointed out (see above), the introduction of plants and herbals (rongoā) to Māori medicine is

⁷⁴ Colenso to the CMS secretaries 31 January 1853. Thomas John Graham’s *Modern Domestic Medicine* (1827) and his *On the Diseases Peculiar to Females* (1834; Fig. 14) were popular at the time. Graham was a medical entrepreneur.

⁷⁵ Ralph J 1853. Letter to CMS. Alexander Turnbull Library Ms-copy-micro-0198.

post-European. Nonetheless Colenso used Māori knowledge of plants in his botanical studies, writing, for instance, to WJ Hooker of one specimen,

Calystegia tuguriorum, Forst. I send you this, that I may the better call your attention to the fact, that the roots of this species were formerly eaten commonly by the Natives, and are now eagerly sought after by pigs.—Now C. sepium is a terrible purgative.⁷⁶

He used physical treatments too: in later life he explained “The Maori cold-water cure for fever—(no doubt) was *following* my example, in the ’40’s. I had a very severe case in my household—the patient was getting round nicely—but early & imprudent exposure &c brought a relapse: I was *much* concerned, saw little hope! & determined to adopt Dr. Cullen’s remedy, so a large door was placed sloping on edge in garden & patient, naked, deluged with cold water from big garden pot & bucket 3ce. daily. Pulse 110 & altg. and in 2–3 days change for better, & in due time wholly recovered: case made great noise at time among Maoris: Wairarapa, *then*, under my care: I have told our M.D’s. of it.”⁷⁷

Expert witness

Colenso appeared in the Supreme Court in Napier in 1862 as an expert witness before His Honor Mr. Justice Johnston. The *Hawke’s Bay Herald* reported on the trial of “Netane Te Huiki, an aboriginal native, (who) was placed at the bar, indicted for that, not having the fear of God before his eyes, and being moved and instigated by the devil, on the 26th day of May last he did feloniously and with malice aforethought, kill one Hiraina (his wife).” Te Huiki asserted that his wife had killed herself.

“William Colenso, sworn, deposed:—I have been in the colony nearly 29 years. I have been nearly the whole of that time shut up among the natives, and have observed their habits and customs. Suicide was very common among them at one time. There was no superstition against suicide, but one in favor of it—a great deal respecting which will be found in Sir George Grey’s collection of native songs. Suicide is of more rare

76 Colenso to WJ Hooker 22 January 1851. This is ethnobotany in the cause of taxonomy: “Colenso was one of the few European botanists who took any interest in indigenous knowledge; the uses to which ‘the locals’ put plants was seen as a sufficient basis for a species name in his eyes.” (Endersby J 2001. “From having no Herbarium”. Local knowledge vs. metropolitan expertise: Joseph Hooker’s Australasian correspondence with William Colenso and Ronald Gunn. *Pacific Science*, 55 (4). pp. 343-358).

77 Colenso to RC Harding 17 May 1895. *ATL qMS-0498*.

occurrence now. It was at the time of which I have spoken more common among the females than the males; seldom have I known a male committing suicide.”⁷⁸

Clinical practice

Colenso worked from the “surgery” in his home at Waitangi in Hawke’s Bay (see Fig. 15) and visited the sick routinely on weekdays. During his journeys and for urgent cases at home he tended the sick every day of the week.

During the past year I have been engaged as follows. On the Lord’s Day in holding Divine service twice, and in Catechizing & teaching school. On Weekdays in attending to the Adult male schools, instructing and examining Natives, candidates for Baptism and the Lord’s Supper, holding Bible classes & teacher’s do., visiting sick and dispensing medicine, settling disputes &c. &c., and on Thursday evenings (and every evening when travelling) lecturing and also attending to very many secular matters of the Station.—⁷⁹

He made countless general remarks throughout his journals about mixing and giving out medicines to the sick and to his Native Teachers to take back to their villages. Occasionally he referred to specific cases. Here is a smattering...

4 October 1841 (Whangarei): arrived at Awaroa, a little village where several whites reside, saw Peter G. and his native wife, both unwell, gave them a little Medicine and Counsel.

7 January 1845 (Waitangi mission station, Hawke’s Bay): Called up, at night, by Tiakitai, to give out medicine.

21 January 1845 (mission station): employed in mixing and dispensing Medicine, for which many were anxiously awaiting my arrival. Numbers of sick everywhere, but in almost every case they recover.

22 January 1845 (mission station): still employed in administering medicine, dressing wounds, talking with Natives, and buying Firewood, Potatoes, and Corn, and jobbing about Station. Had a practical illustration on a small scale of Acts

⁷⁸ Hawke’s Bay Herald 7 October 1862.

⁷⁹ Colenso W. Report to the CMS for the year ending Dec. 1847.

xxviii.4–6;⁸⁰—a man, whose wounded hand I was dressing, fainted away, on which the Natives standing by, said, “He has killed him!”—on my recovering him with cold water thrown on his face, and stimulant applied to his nose, they exclaimed, “See! he has made him alive!!”

27 January 1845 (mission station): Gave out Medicine today to very nearly 50 persons, some from Te Rotoatara and some from Manawatu District.

25 February 1846 (Pakuku, near Cape Turnagain): Being welcomed we entered, shook hands, sat, and conversed with Te Wereta, whom I found unwell, suffering from a severe fall from a tree. ... I gave him some Medicine, at his earnest request, and remained nearly 2 hours.

28 February 1846 (Oroi, Wairarapa coast): A boy fell from a high karaka tree this afternoon, and was supposed at first to be dead, visited him & administered medicine & tea, in course of the night he recovered.

20 March 1846 (Te Kaikokirikiri, Masterton): Evening, spent talking with the Natives at the tent door until late; the old Chief, Te Korou, among the number. When last here, he was very unwell, and, it was said, he would die, he being considered under a Native malediction; I, then, visited him, gave him a little medicine and advice; GOD graciously blessed the medicine and he recovered. Both himself & people seemed to have a grateful remembrance of the matter.

14 August 1846 (mission station): Morena, a heathen Chief from Manawarakau... called today, humbly soliciting aid, suffering extreme pain from inflammation of the bladder; I was glad to be of service to him. And these few peculiar Medicines which were disallowed me by the local district Comee., are again of signal service.

18 February 1847 (Rotoaira, Taupo): my old lad Samuel came groaning to my tent, apparently dying. I was obliged to get up & take him in to my tent, & administer some strong medicine without delay; by daylight he was much better but very weak.

24 March 1847 (Ngawakatatara, Hawke's Bay): The Natives informed us of the death of William Te Rurenga at Te Waipukurau village, (a Native, whom the

80 A viper had bitten St Paul's hand... “4 And when the barbarians saw the venomous beast hang on his hand, they said among themselves, No doubt this man is a murderer, whom, though he hath escaped the sea, yet vengeance suffereth not to live.

5 And he shook off the beast into the fire, and felt no harm.

6 Howbeit they looked when he should have swollen, or fallen down dead suddenly: but after they had looked a great while, and saw no harm come to him, they changed their minds, and said that he was a god.”

Archdeacon saw there nearly a fortnight back in a very low state, & to whom I had sent by Paul Te Nera a little simple soothing medicine,) and of Te Waikoko, at Te Rotoatara village, and of the arrival here of Paul Te Nera's messenger to inform me of the probable ambush of the Ngati Matekato Tribe, who affirmed that I had killed William Te Rurenga with my Medicine, and that now they would kill me!! This little tribe has long been noted for its turbulence, nearly all its members are Heathen.

14 April 1847 Otaruaia, southern Wairarapa): Leaving my lads to pitch my tent I called upon Mr. Gillies, a settler residing hard by (one of whose children I had Baptized on a former visit,) found him not at home, but his wife who had that day been taken very unwell, gave her some suitable advice, and sent her immediately some medicine.

18 May 1847 (Mataikona): I found Broughton Te Kuhu very ill; administered medicine with suitable words of advice.

24 May 1847 (Porangahau): one old woman... had been for some time ill of dropsy, &c., with scarcely a hope of recovery; ... conversed with her &c., gave her medicine, &c.

19 June 1847 (Tangoio): I visited a sick old woman, who was lying in a shed in a plantation nearby, I exhorted her, &c., and gave her Medicine.

5 July 1847 (: This morning early the newly-born Child of the Heathen Chief Kurupou, was brought me for advice and medicine; it is a very miserable looking infant, covered with large ulcers, and I have scarce a hope of its living. We did, however, our best for it.

6 July 1847 (mission station): At night, after dark, a messenger came from Te Hapuku, bringing a letter containing an earnest application for some of the medicine for a young child of his also, for whom and for the mother he has had medicine, &c., several times of late.

5 October 1847 (Pakowai, near Porangahau): During the afternoon, a white man, who had lately come to reside in the neighbourhood, called to see me, to get a little medicine, &c.; I had some serious conversation with him, and, before he left, he asked for a Bible and Prayer-book, which I promised to send him.

18 October 1847 (Te Awaiti, Wairarapa coast): gave out medicine to several, among others to a white man residing at the next village for his concubine.

27 November 1847 (Patangata): After prayers a man came bringing a Child, (a little orphan girl, who was in my class at the School at Te Waipukarau in the morning,) saying, she had just got her leg severely lacerated by a canoe upsetting, the same being carried by the current upon the child as she lay upon the shoal in the river; seeing it was (apparently) well-bound up, and the blood only just stanchd, I forbore undoing the rags, telling him it would be better to do so early in the morning....

28 November. Lord's day. First thing this morning I proceeded to examine and dress the little wounded girl. But, first, I found that none of the Natives would give so much as a piece of rag to dress and wrap her leg in! Ultimately I was obliged to tear up one of my own shirts for the purpose. On proceeding to undo the rags from her leg, such a sight presented itself! The whole of the flesh, sinews, &c., had been completely torn off, and violently carried round the leg, from above the knee to the ankle; the bones of the knee joint were completely denuded, and the whole of the torn flesh mixed with gravel, straws, bits of sticks, &c., &c! It took me more than an hour to clean and dress it, and, wonderful it was to observe the child, who, though only about 6 years of age, appeared to suffer but little pain!—Fortunately I had saved the little fat which remained from frying a small portion of pork for my supper, and which I had also put into water, or I should have also been without any kind of ointment. I have scarcely, however, a hope of the Child's recovery.

24–29 January 1848 (Hawke's Bay: Colenso has influenza): A whole week confined! severe Cough & pains in my Chest. At one time (the 26th) I scarcely thought I could recover. Received several conciliatory calls from Xn. Natives, and Notes from others. Incessant demand for Medicine, which Mrs. Colenso attended to, and which, in her weak state, has nearly worn her down.

4 February 1848 (mission station): Besieged with applications for Medicine from all quarters. The Epidemic having now got inland among the larger villages.

28 February 1848 (mission station): Evening, a white man called, who had been suffering from epilepsy, gave him Medicine & advice;

21 March 1848 (mission station): Engaged in attending to calls for Medicine &c. At night a lad was brought me who had had his fingers smashed in a steel wheat mill; bound up his hand, &c.—

19 May 1848 (Te Kopi): I gave out some Medicine for 2 children ill with Hooping cough.

20 June 1848 (Wellington): Afternoon, engaged in putting up some medicines for Dr. Fitzgerald, (Native Hospital, Wellington,)

1 November 1848 (Mataikona): During the morning, Te Aweke, the old priest of the tribe, (who, on my last visit I had persuaded to attend Divine Service,) came to see me, & to shew me his ailment—a wounded eye, which had been very severely bruised indeed with a large piece of wood, which, while he was chopping it, had rebounded suddenly from the ground;—and to ask advice and Medicine. In talking with him, I remarked, “Since you are such a famous priest who can cure all maladies, why don’t you cure yourself?” He immediately answered, (with all the quick shrewdness of the New Zealander,) “So I would, but I was apprehensive of offending you.” I assured him he would not offend me in his doing himself any good; and begged him to cure himself. He soon, however, acknowledged, that now his incantations, &c., were of no effect.—And this is now the common tale of all the few N. Priests who still remain in Heathenism—even to those, who, worse than blind, seek their impotent aid!

1 October 1849 (Petane): Returning from the Chapel to my tent, an elderly native came, and asked me for medicine for his daughter, (Reremorehu, a girl about 12 years of age,) who, he said, was “very ill with a peculiar malady.” I gave him what I could, and advised him, at the same time, to tell her to pray to Jesus. On which he quickly answered, in a jocose tone, “She had a priest already to pray for her” (meaning a native): I now knew him to be a Papist. The girl had been, however, in our school here, but a short time back. ...

Returning to my tent by starlight, quite weary, having spent nearly the whole day from sunrise in the Chapel, and sitting down in my tent to a cup of tea, one of my domestic natives, informed me the reason why the little girl, Reremorehu (the daughter of Te Korou, who had this morning applied to me for medicine for her,) had become a Papist, namely, her having been sold by her unnatural father, to a wretch of a white man now living here, and that she had been ill almost ever since, her malady being vagina lacera! I felt both sickened & indignant at hearing Edwin’s recital, and on Te Awī (one of the principal Chiefs of the Tribe professing Xy.) coming to my tent to see me, I enquired of him if it was true. He quickly & carefully replied in the affirmative. Several natives having assembled about my tent, I expressed my detestation of such abominable practices, and denounced in my strongest manner such cursed traffic. And, finding, alas! that they were all inclined to think favourably of it, (and the more fully to shew those callous-hearted fellows how very heinous I considered such conduct to be,) I ordered my baggage-bearers to strike my tent and pack up, that we might leave at once, instead of

waiting for the morning, as previously arranged. Telling the Church, (in conclusion,) that inasmuch as they were now greatly superior every way, in rank and power and number and knowledge, to the united Papist & Heathen parties—and, as they well knew how I had formerly dealt with the Ngatihinepare and other neighbourhood Tribes for similar misconduct,—I should not see them again until they had taken away the poor girl from the brutal pakeha, and either separated those evil-doers from among them, or themselves from the evil-doers. So, without shaking hands with any one, at ix. p.m., we left the place, amid much loud wailing from a few of the better-minded folk; and, at ½ past xi. reached Bethany. God only knows what I suffered in mind this night upon the account of this people.

Colenso rarely mentioned the diagnosis—the disease actually causing the illness—at times simply attributing the symptoms to poor diet, laziness or sin.

The leap directly from symptoms to treatment, foregoing the intermediate step of diagnosis (characteristic of most “alternative” medicine) aside, this is the stuff of primary medical care—night calls, busy flu epidemics, dressing wounds, pakeha and Māori patients, immunisations, falls from trees, nonspecific symptoms, urinary infections, accusations of medical harm, oedema, impetigo, working despite one’s own illnesses (helped along with a little self-medication), hearing stories of quack treatments, epilepsy, crushed fingers, 50 patients on a busy day, whooping cough, the clash of one’s own beliefs with those of the patient, foreign body in the eye, the sexual abuse of children and the inevitable associated anguish, expert witness at a trial—and nothing changes: this is the stuff of general medical practice today.

Looking back and looking forward

Half a century after his missionary and medical practice, Colenso, now an 85-year-old elder statesman and natural philosopher, liberal and darwinian in outlook, delivered his Presidential address to the Hawke’s Bay Philosophical Institute on 11 May 1896.⁸¹ He looked back on the evolution of medicine and remembered those who had died, including

Louis Pasteur, who passed away from us in September, 1895.... Near the end of 1857 he entered on the line of research to which he devoted the rest of his life, and by which he conferred untold benefits on humanity and the lower animals. Helmholtz had in an earlier work proved almost to a certainty “that the actual presence of a living creature [“vibrio,” as he called it; “bacterium,” as we more

⁸¹ *Transactions* 29: 129–150.

commonly call it now] is necessary for either fermentation or putrefaction." Pasteur gave complete demonstration of that conclusion, and early expanded it to vast and previously undreamt of extensions of its application. From Pasteur's discoveries, Lister was led to work out the principles of antiseptic surgery, the practice of which he commenced in the Glasgow Royal Infirmary in 1865. Having been led to trace microbes as the origin not only of fermentation and putrefaction, but of a vast away of destructive blights happening to plants and animals—vines, silkworms, birds, cattle, and mankind—Pasteur was forced to take up the question, as of supreme importance, "Whence came these microbes, and what are their antecedents?" We are sometimes told, "from warmth and moisture"—and this, too, in scientific journals of 1895, under the more learned name, perhaps, of "abiogenesis," or the fortuitous concourse of atoms! Without wasting words to prove theoretically that while stones falling together may, as we all believe they have actually done, make a solar system with a habitable planet or planets, they cannot make a man, or a microbe, or an organic cell, with its property of heredity. Pasteur set about practically to trace the antecedents of every microbe he met with; and he found for it in every case a living thing, whether in the air, or in water, or in earth. During nearly all the latter part of his life, and to the end, Pasteur devoted himself to biological research, and to vigorous practical realisation of its benefits for the world. And we here, in this far-off colony, are receiving benefits from Pasteur's labours and discoveries. I have felt constrained to say these few words in honour of that great chemist and biologist.

And, still interested in medicine, he looked forward too—to antitoxins, Xrays...

And now for a few words respecting some of the higher scientific discoveries of the past year. To this subject, however, I can only make very scanty allusions; but this is a small matter, as you have already heard of them from better-informed sources.

Probably the discovery of a second gas as a component in our common atmospheric air stands pre-eminent. I allude to helium; its great ally being argon, also lately discovered by Lord Rayleigh. Then there is anti-toxin, as a remedy in certain forms of severe disease; and more lately the curious and highly-important discovery by Professor Röntgen of photographic rays, or the "new light," by which near objects unseen by mortal eye, through their being imbedded and hidden in opaque bodies, are made clearly visible. This interesting discovery, which is likely to become very serviceable in some cases of surgery, has already attained a high position in the medical world, especially on the Continent of Europe. Indeed, we are continually receiving notices from abroad of fresh and

further useful and surprising discoveries being made in this direction. I shall be able to show you a plate as an object-lesson representing its operation, which will cause it to be the more readily understood.

REFERENCES

Parts of this booklet have been published in different forms in issues of *eColenso*, the electronic newsletter of the Colenso Society, and in the introduction to the second edition of Bagnall and Petersen's biography of Colenso.⁸²

References are given in full in the footnotes, except as follows.

Colenso's Journals are in the Hocken Library, MS-0064 and MS-0065, ARC-033, PC-0061 to PC-0065.

Colenso's letters to the Church Missionary Society are in the Hocken Library, MS-0063, ARC-0033, PC-0059 and PC-0060.

Colenso's letters to WJ and JD Hooker are in the Library of the Royal Botanic Gardens at Kew. Transcriptions have been published in St George IM 2009. *Colenso's collections*. New Zealand Native Orchid Group, Wellington.

⁸² Bagnall AG, Petersen GC 1949. William Colenso, printer missionary botanist explorer politician, his life and journeys. Reed, Wellington. Second edition 2012, St George IM (ed.), Otago University Press.