# COLONIAL SANITARY STATISTICS AND ABORIGINAL DEPOPULATION

y the late twentieth century residential schools for aboriginal children, in Canada at least, were condemned for the suppression of aboriginal culture, religion and language and numerous instances of physical and sexual abuse. In Nightingale's day the issue was excessive illness and mortality, with the related fear of "depopulation," at least the decline in aboriginal numbers and fears for extinction in some instances. There is simply no discussion either of possible abuse (the informants of course were the authorities themselves) or of language loss. The issue of cultural and religious suppression comes up only obliquely. Nightingale evidently wanted the children to be "civilized," which meant to adapt to Western ways and enjoy the advantages of Western science and medicine, but was sensitive to the pace and cost of change. She was interested in such practical questions as clothes for people who normally went without, recognizing that rain runs off naked skin quickly and people can dry themselves easily at a fire, while with clothes on they are chilled and vulnerable to pulmonary disease.

It seems that the initial idea of conducting a study of mortality rates in aboriginal schools came from Sir George Grey, whom Nightingale met in 1859 when he was governor of Cape Colony, in southern Africa. He had completed a term as governor in New Zealand and was concerned about losses in the Maori population there. Although he later returned to New Zealand, he seems not to have done anything more on the subject (there is further correspondence with him on other matters). Nightingale worked out the questionnaire to collect the data with her close colleague, a doctor and sanitary expert, John Sutherland. She also consulted William Farr, statistician and medical doctor.

<sup>1</sup> Sir George Grey (1812-98), after a term as governor of New Zealand, 1845-53, became governor of Cape Colony in 1854. He returned for a second term as governor of New Zealand in 1861, was elected to the New Zealand Parliament in 1875 and later became prime minister.

and Edwin Chadwick, who was then the most prominent "sanitarian" in Britain and himself interested in school questions (especially the incorporation of physical activity with mental). Like Chadwick, Nightingale advocated more physical exercise for schoolchildren in all schools, not just those for aboriginal pupils. She saw the dangers of inactivity as greater for the latter, for they had been taken from "openair habits" and placed in ill-ventilated, overcrowded buildings.

The questionnaires were sent out by the Colonial Office; the then colonial secretary was the Duke of Newcastle (1811-64), an acquaintance of Nightingale's from the Crimean War (he was secretary of state for war 1854-55). Nightingale approached him in 1860 and he was highly supportive of the project. Nightingale herself did the data analysis, including the tedious work of organizing data reported for different time periods into one comparable unit (annual mortality rates). This she described as "reducing" the data. The paper was read at the meetings of the Social Science Congress at Edinburgh in 1863 and published in its Transactions. That it was read by a Colonel Sykes at a meeting of the British Association in Newcastle was "not an arrangement of mine." Perhaps it was the Duke of Newcastle's, for the same note states that he asked that the paper not be sent out to the colonial governors and bishops until after that meeting.<sup>2</sup> Nightingale also had the material printed separately as a book, with the same title, now including the tables, hence 47 pages.<sup>3</sup>

In a letter to Dr Farr Nightingale despaired of the quality of the returned questionnaires, inviting him to dinner with an offer to "show you those scrofulous returns."4 She evidently gave him some of the forms, for he replied with some advice. She then thanked him for his "proposal" and asked for the return of the forms. "All we want is to make a practical proposition for the Duke of Newcastle and this we shall do upon your advice that we have data enough."5

To Edwin Chadwick Nightingale reported that the replies were "imperfect for practical purposes but very interesting for ethnography."6 The following year she regretted that she did not have a paper

<sup>2</sup> Incomplete letter 29 July 1863, Wellcome (Claydon copy) Ms 9023/44.

<sup>3</sup> There is a receipt for £45.9 from Eyre & Spottiswoode, 24 July 1863, for printing and sewing together 300 copies of the paper, ADD Mss 45798 f138.

<sup>4</sup> Letter to Dr Farr 28 April 1860, App Mss 43398 f180.

<sup>5</sup> Typed copy of letter to Dr Farr 22 July 1861, Add Mss 43399 f35.

<sup>6</sup> Letter to Edwin Chadwick 16 February 1861, ADD Mss 45770 f221.

ready "on the connection of education with health in our colonial aboriginal schools," which Chadwick had presumably requested for the association of which he was president. She described the issue as "a question among many others which you have made so peculiarly your own." Nightingale was still getting the returned data "reduced," and, with her ill health, the paper was not ready.<sup>7</sup>

Chadwick himself worked on school issues, paying much attention to such practical matters as wet or dry clothing. Years later Nightingale realized that some of her old colonial schools data would be useful to him: "I hope you received at Leeds my pamphlet on 'Colonial Native Statistics' with the passage about Natal and the wet clothes in time."8

Nightingale evidently found the whole process disappointing. The quality of data was abysmal, so much so that she opened her paper with the startling declaration that there was "nothing in it," and that that was why she had written it. "It is to show that statistics, capable of affording complete practical results when wanted, have scarcely made a beginning in the colonies" (see p 168 below). She did "the best I could with it" (475). In a letter to Sir George Grey she said: "I never did anything so unsatisfactory," and called the results "so imperfect that I scrupled as to making any use of the data" (see p 196 below). The tables themselves were not reproduced in the *Transactions* paper but printed as a fifty-nine page appendix. They appear in this Collected Works only in the electronic text. She urged that a similar system for recording vital statistics be set up in the colonies as was in place in the U.K.

Many schools and hospitals did not send in any material. Curiously there are no data for New Zealand, although it was Sir George Grey who had prompted the study in the first place. The data eventually collected were insufficient for statistical generalization but served to indicate the types of disease from which aboriginal children in schools were dying. As to the numbers Nightingale suggested that the mortality of aboriginal children at schools was "double that of English children of the same ages" (see p 170 below). Moreover, most of the mortality was the direct result of preventible diseases. There was nothing to show that "education properly conducted tends to the destruction and disappearance of native tribes" (see p 173 below). But education had to take into account the "physiological effects" of "altered habits" on health. The "inherent diseases" of these areas, when brought into contact with "civilization,"

<sup>7</sup> Letter to Edwin Chadwick 28 September 1862, ADD Mss 45771 f6.

<sup>8</sup> Letter to Edwin Chadwick 20 October 1871, ADD Mss 45771 f134.

without specific precautions for preserving health, would increase mortality. The reform of school regimes was required (see p 178 below).

Nightingale's understanding of "uncivilization" meant people without a fixed form of settlement or towns or, jokingly, the civilized were those "who can live in a city or village without cutting each other's throats." The issue was not race (even as then understood) or geography per se, for the same consequences of ill health and mortality occurred when British people left their "open country" for "a narrow, crowded London alley" (see p 181 below). Teachers, however, who brought "the inestimable blessings of Christian civilization," went into these areas "just as they would into English villages." Nightingale indeed often drew parallels between England and the colonies. "The educational idea in the colonies is just as deficient as it is at home," but the difference was that it was "attended with worse physical consequences" (see p 177 below). When she said: "By far the greater part of the mortality is the direct result of mitigable or preventible diseases," she might as easily have been referring to England. The "unsatisfactory" state of hospital statistics was the same as in "many of our home hospitals" (see p 174 below).

Part 2 of the inquiry involved sending forms to aboriginal colonial hospitals, so that the data on diseases for children could be compared with that for aboriginal adults. Again Nightingale complained about insufficient numbers for statistical purposes. The aboriginal hospital statistics were in much the same "unsatisfactory condition" as were hospital statistics generally in England. They could be used only for descriptive purposes. Like the school statistics, and with the same qualifications regarding inadequate data, Nightingale pronounced the death rate to be "very high" (see p 167 below). As well as her own data she incorporated observations on traditional non-medical treatments then in practice in the colonies.

The hospital returns "throw little light on the causes of the disappearance of native races, unless these are to be found in the great prevalence of tubercular and chest diseases in certain of the colonies (Australia, Kaffraria and Canada)" (see p 178 below). It was not clear, however, why these diseases should be so high in temperate climates. Nightingale then introduced the problem of the character of the British settlers in the colonies: "not always the best of the British people," and even with a "depraved standard of civilization" (see p 179 below). The sale of intoxicating drink and prostitution resulted in declining births.

Nightingale published a follow-up paper to the inquiry in 1864, also with the National Association for the Promotion of Social Science.9 It reported that copies of the previous paper had been distributed to all the colonies, and resulted in numerous further communications. This short paper gives excerpts from those reports, with almost no comment from Nightingale.

Nightingale asked the Duke of Newcastle to have a circular drawn up and sent to the governors to "lead the way to more correct statistics" and point out "the great advantage of schools, hospitals and other institutions keeping more complete data." It seems that this was never done, nor any other of the "state interference" enacted for which she had called. When Harry Verney's son Edmund<sup>10</sup> was stationed at Vancouver Island she inquired as to the circulation of her information there: "I am very glad that your son is going to such a good and interesting station as Vancouver's Island. I believe the Duke of Newcastle sent my circular about colonial schools there, as well as to our other colonies. But I don't suppose they have any children yet there."11

Nightingale largely gave up on the issue. She responded to a woman who had written her on problems in an asylum in Sydney in 1866 and passed on the information to the Colonial Office. But she never included colonial schools and hospitals (apart from India) as part of her "business." Certainly she was convinced of the fact of significant "unnecessary" mortality-rates roughly twice those of English children, and adult deaths in hospital also "very high." Yet the absolute numbers (in the millions) of people dying were not high in either schools or hospitals, clearly not in comparison with the numbers dying unnecessarily from disease, malnutrition and outright starvation in times of famine in India. The ill and fatigued "passionate statistician" had to make priorities and Nightingale chose to stick with India.

A short note on the New Zealand depopulation issue follows the paper. 12 Following it correspondence on the study follows the paper and a shorter note on the New Zealand depopulation issue.

<sup>9 &</sup>quot;Note on the Aboriginal Races in Australia," Transactions of the National Association for the Promotion of Social Science.

<sup>10</sup> Edmund Hope Verney (1839-1910).

<sup>11</sup> Letter to Harry Verney 6 March 1862, Wellcome (Claydon copy) Ms 9000/12.

<sup>12</sup> Thanks to Lady Jocelyn Keith for providing a partial transcript of the two articles, and for her comments on the study, given at a conference of the Collected Works of Florence Nightingale project, University of Guelph, May 1998.

## "Sanitary Statistics of Native Colonial Schools and Hospitals"13

Source: "Sanitary Statistics of Native Colonial Schools and Hospitals," Transactions of the National Association for the Promotion of Social Science (1863):475-88

### Part 1 Sanitary Statistics of Native Colonial Schools

By far the greater part of the mortality is the direct result of mitigable or preventible diseases.

If it is said, on reading this paper: There is nothing in it, I answer that is why I wrote it, because there is nothing in it, in order that something might come out of nothing. It is to show that statistics, capable of affording complete practical results when wanted, have scarcely made a beginning in the colonies. It is to show that, when the Colonial Office with great labour and no little cost has collected-and I with the same have reduced—these materials, they are incapable of giving all the beneficial information expected. The material does not exist, or, if it does, it is in a very undeveloped state. Such as it is, I have tried to do the best I could with it. This is the result.

Several years ago, before Sir George Grey returned to his government at the Cape, I had a conversation with him on a subject which had dwelt very much on his mind, viz., the gradual disappearance of the aboriginal races from the neighbourhood of civilized communities. One of the points raised in the discussion was the probable effect which European school usages and school education might exercise on the health of the children of parents and of races who had never hitherto been brought under education.

It appeared of great importance to ascertain, if possible, the precise influence which school training exercised on the health of native children. I applied to the Colonial Office for aid in carrying out such an

<sup>13</sup> For discussion of the depopulation issue see Jocelyn Keith, "Florence Nightingale and New Zealand: A Study in Consultation, "Florence Nightingale: Statistician and Consultant Epidemiologist," "What If They Had Listened to Florence?: An Essay in Contrafactus" and "A Voice in the Wilderness: Florence Nightingale's Report on Maori Health to Sir George Grey"; and Keith Seaman, "Florence Nightingale and the Australian Aborigines."

inquiry. The Duke of Newcastle entered warmly into the subject, and offered at once to call for any information which might throw light on it. I had a simple school form prepared and printed, copies of which were sent by the Colonial Office to the governors of the various colonies. Returns were made from a large number of schools, but as no information has been received from many more, I presume the school statistics did not afford the means of supplying the required information.

I have received, through the Colonial Office, filled-up returns from 143 schools in Ceylon, Australia, Natal, West Coast of Africa and British North America [Canada], the results of which are given in a series of tables, showing the name and date of opening of each school, the number of years included in the return, the average number of native children, their sexes and ages for quinquennial [five-year] periods, together with the mortality for the period included in the return, the total average attendance for all the schools in each colony, also the total deaths, arranged in quinquennial periods, so far as it could be done. But, as the periods vary considerably, it has been necessary to reduce the data under one common denomination, to obtain the absolute annual rate of mortality for each sex and age.

From this reduction it appears that the average attendance of all ages at these schools has been 7485 boys and 2453 girls, making a total of 9938 as the number of children on whom the rate of mortality has been obtained. A small proportion of these children, only 672 boys and 422 girls, were under five years of age. There were 3546 (2651 boys and 895 girls) between the ages of five and ten. Between the ages of ten and fifteen there were 3268 children, viz., 2288 boys and 980 girls. At the age of fifteen and upwards there were 1391 boys and only 156 girls attending school.

The total deaths, for the various periods, on this school attendance were 451 boys and 132 girls, of all ages, besides 79 boys and 39 girls who are returned as leaving school annually to die at home. It is important to remark that, out of a total average school attendance of 9938, only 235 boys and 82 girls are stated to leave school annually from ill health.

The death rate varies considerably in different colonies. It is least among the native children at Natal, where a little more than five males per 1000 and three females per 1000 die annually. The Ceylon schools give a death rate of 14½ per 1000 per annum for boys and about three per 1000 per annum for girls. But, including deaths among children who leave school to die at home, this rate would be nearly doubled.

The Indian schools in Canada afford a total annual death rate of 12½ per 1000 for both sexes, but the mortality of girls is nearly double that of boys. The Sierra Leone schools afford a very high rate of mortality, viz., 20 per 1000 for males and 35 per 1000 for females. The Western Australian schools yield the highest death rate of any, nearly 35 per 1000 boys and 13 per 1000 for girls. These death rates are of course only approximations to the truth. But on any supposition they are very high.

It is important to compare these death rates with those of children of the same ages in England, but we have only the means of doing so for five years of age and onwards. The English rates show that from five to ten, the total mortality of both sexes is 9.2 per 1000. From ten to fifteen it is 5.3 per 1000. Above fifteen it is 8.4 per 1000. Making allowance for native children dying at home, we shall be within the truth in assuming the mortality of native children at school as double that of English children of the same ages.

The next point of the inquiry was to ascertain the nature of the fatal diseases, and here we find a remarkable difference in the returns from different colonies. Thus out of 190 deaths in the Sierra Leone schools, all except eight are due to smallpox, measles, whooping cough, scarlet fever and other forms of fever. In the Ceylon schools these same diseases, with the addition of diarrhea, dysentery and cholera, give rise to 261 deaths out of a total mortality of 341. In contrast with this great prevalence of miasmatic diseases, the West Australian schools yield only two deaths from children's epidemics out of a total mortality of nine. In the Natal schools three children died of miasmatic diseases out of a total mortality of sixteen, while in the Canadian schools there is only one miasmatic death out of a total mortality of twenty-seven.

The adult natives at many of the colonies are considered specially subject to tubercular diseases, more particularly of consumption. This class of diseases is indeed supposed to be a main cause of the gradual decline and disappearance of uncivilized or semi-civilized races.

The facts, as regards these colonial schools, are as follow: amongst the Sierra Leone children there is only one death from consumption and one from scrofula reported out of a total of 190 deaths. In the West Australian schools two of the nine deaths arose from consumption. In the Natal schools there was one death from consumption and one from scrofula out of sixteen deaths, but there died seven children

of other chest diseases besides consumption. The Ceylon schools yielded seven deaths from consumption, five from other chest diseases and one from scrofula, out of a total mortality of 341.

These figures, so far as they go, show comparatively little liability to consumptive diseases among children in these colonies. But there is a native training institution in South Australia in which a very large proportion of the mortality is due to tubercular diseases. Scrofula, phthisis and hemoptysis are returned as having occasioned 69.6 percent of the total mortality in the institution among males, and 61.9 percent among females. When we cross over to Canada we find that, out of a total mortality of twenty-seven, sixteen deaths arose from consumption and five from scrofula. Indeed, all the specified deaths arose from tubercular disease except one solitary death from fever.

I will next describe shortly the method of the school education, with its probable influence on the children's health. The facts under this head are given in the form of notes to each school return, the general results of which are as follow. Many of the schoolhouses are described in the returns as of bad construction, ill situated for health and the ventilation very insufficient. Some of them are unfavourably situated for free external ventilation, or their local position is damp and subject to malaria, the consequences of which, as well as the results of general defective sanitary condition in their vicinity, are evidenced by the great prevalence of miasmatic diseases, such as fevers, diarrhea, dysentery and even cholera among the children.

The period of tuition varies considerably, from two up to ten or more years. The school instruction is generally five, in a few cases six, days a week. At a few stations nearly half the year is allowed for holidays, but generally the holidays are from two to six or eight weeks.

In most of the schools there seem to be no play hours on school days. When play hours are allowed these are from half an hour to two hours. At about a dozen schools only is there any outdoor work combined with instruction. The largest amount of this work is given in the Natal and Canadian schools. Out of the whole number there are only nine schools at which there is any attempt made at combining the elements of physical education with the school instruction, and even where this is done the measure is partial and inefficient, being confined to a few exercises or simply to bathing.

The obvious physiological necessity of engrafting civilized habits on uncivilized races gradually through the means of systematic physical training appears to be nowhere recognized, except at New Norcia (Benedictine) school, Western Australia, on the return from which there is the following very important statement. Gymnastics are stated to be necessary to prevent sickness, and the reporter proceeds: "The idea of bringing savages from their wild state at once to an advanced civilization serves no other purpose than that of murdering them." The result of the outdoor training practised at this school is said to have been hitherto successful "in preventing the destructive effects of this error."

Confinement appears to be peculiarly injurious to the aborigines of South Australia, for the governor states that he "almost always finds it necessary to release prisoners before the expiration of their sentences, as death is apt to ensue from any prolonged confinement." Even partial confinement in schools, he thinks, injuriously affects the native constitution.

Another very important observation bearing on the necessity of careful consideration of habits is recorded on the return from one of the Natal schools. It might be supposed that one of the most obvious duties in bringing native children to school would be to clothe them, but nevertheless clothing an uncivilized child requires care. (People have been asked to assist in making clothing for the Kaffir tribes whom missionaries were going out to address, that the feeling of decency might not be offended in addressing the naked.) In their natural state they expose themselves to torrents of rain which runs off them, and they are easily warmed and dried at the hut fire. But it is stated that, when clothed in flannel and jersey, they get chilled by the rain and that pulmonary diseases ensue as a consequence.

The method of conducting colonial schools appears to be based on our home system, without reference to physical training or other local conditions affecting health. This fact, together with the high rate of mortality, is the most prominent result of our inquiry. And, although there is not sufficient evidence to show to what extent school education increases the mortality, there is strong reason to believe that it is a cause. By far the greater part of the mortality is the direct result of mitigable or preventible diseases.

In all the schools within or near the tropics the miasmatic class of diseases occasions most of the mortality at the earlier periods of life. A considerable proportion arises from smallpox, showing bad management of children, and that vaccination is either neglected or imperfectly performed. The other fatal diseases are mainly those which in this country are connected with bad drainage, deficient and bad water

supply, overcrowding and want of sufficient house accommodation and cleanliness. In the Canadian schools consumption and scrofula appear to occupy the place of miasmatic diseases. But there is nothing in the school education, as described in the returns, sufficient to account for the special prevalence of tubercular diseases in these schools. The causes must probably be looked for in the close foul atmosphere of the native dwellings in a climate where warmth is more likely to be sought by closing every opening capable of admitting fresh air than would be the case in warmer latitudes, together with exposure and other conditions depressing to the general health.

Although these returns show the necessity of making systematic physical training and bodily labour at useful occupations an element absolutely essential, and never to be neglected in the training of uncivilized and half-civilized children in civilized habits and trains of thought, there is nothing to show that education properly conducted tends to the destruction and disappearance of native tribes.

The general result may be summed up in the following words: "Educate by all means, but look carefully at the problem with which you have to deal, and above all things never forget that education everywhere, but more especially with uncivilized tribes, must always include physical training and useful work."

## Part 2 Statistics of Native Colonial Hospitals and Causes of Disappearance of Native Races

The tables do not enable us to ascertain directly the state of health or rate of mortality of the native population, but they afford us . . . important information as to the diseases from which natives suffer. . . . With these reservations, the mortality statistics of these hospitals show a very high death rate upon the numbers treated.

Besides this statistical inquiry into the condition of schools, I had forms prepared for colonial hospitals into which natives are received for treatment, in order to compare the school diseases with those prevailing among the adult population. They were sent to the colonies, also by the great kindness of the Duke of Newcastle. Returns have been received from the following hospitals: Freetown, Sierra Leone; Cape Coast; Natal; Mauritius; Colombo and Malabar [Sri Lanka]; King William's Town, Kaffraria [South Africa]; and from two native hospitals in Canada.

These returns were applied for as affording the only apparent means of arriving at a knowledge of the prevailing classes of diseases among natives and of the relative mortality from each class. To arrive at the results I had abstracts of the returns prepared showing the mortality on the admissions for different sexes and ages, and the relative percentages of mortality from each disease. Of course the facts so obtained can be relied on only so far as they represent the proportions admitted and dead from each disease, taken on numbers often hardly sufficiently large for statistical purposes. On account of the smallness of these numbers I consider the results as only approximations, which I give because there is nothing better to be had. The tables do not enable us to ascertain directly the state of health or rate of mortality of the native population, but they afford us, in an indirect manner, a considerable amount of important information as to the diseases from which natives suffer. The hospital statistics appear to be very much in the same unsatisfactory condition as they are in many of our home hospitals. With these reservations, the mortality statistics of these hospitals show a very high death rate upon the numbers treated.

Thus, in Free Town Hospital the mortality to admissions among males is upwards of 20 percent, and among females 18.6 percent of the admissions. (The admissions were obtained by adding the deaths to the recoveries, in the absence of more definite information.) At the Civil Hospital, Port Louis, Mauritius, the mortality is 21.3 percent for males and 38.8 percent for females. In the Ceylon hospitals it is 20.7 percent for males and 18.1 percent for females. At Natal the mortality is much lower, being 12.8 percent for males and 6.6 percent for females. In Kaffraria the mortality for males and females is 21.8 percent. In the Canadian hospitals it is 12.3 percent for males and 14 percent for females.

These high death rates can be attributed only to one or more of the following causes: defective stamina in the population, delay in applying for medical relief, bad and insufficient hospital accommodation, or defective medical treatment and management of the sick. The exact influence of each of these elements could hardly be appreciated without local inquiry, but the statistics enable us to obtain some insight into the matter.

We find, e.g., that in the tropical districts the miasmatic class of dis-

eases occasions a large proportion of the mortality, e.g., at Sierra Leone 20.4 percent of the total mortality among males and 6.8 percent of that among females is due to smallpox; that 34 percent of the mortality among females is due to dysentery, and that 19 percent of the mortality among males is due to periodic fevers. The mortality from miasmatic disease in this hospital is no less than 43.9 percent of the total mortality among men and 43.1 percent of the total mortality among women.

At Cape Coast Hospital the admissions from miasmatic diseases, at least those recorded, amounted only to 9½ percent of the total admissions, and no deaths are attributed to this class of diseases. This is quite sufficient to show the imperfection of the hospital records at this station. At Port Louis Hospital, Mauritius, the miasmatic deaths from dysentery, diarrhea, cholera, continued fevers and rheumatism amounted to 54.9 percent of the total mortality for men and 47.9 percent of the total female mortality.

Dysentery appears to be particularly severe and fatal amongst the natives in Ceylon, for the returns show that 43.6 percent of the men's mortality and 30.1 percent of the women's were due to this one disease. The miasmatic class generally gave rise in these hospitals to 64.3 percent of the total deaths of men and 60.1 percent of those of women. In Durban Hospital and Grey's Hospital, Natal, 41.1 percent of the men's mortality arose from continued fever and 6 percent from dysentery. This latter disease occasioned all the deaths in hospital among women. These two diseases are the only ones of the miasmatic class which proved fatal. Miasmatic diseases appear to be rare among the native patients at King William's Town, Kaffraria. Only one of them, dysentery, produced a fatal result, and it gave rise to no more than 6 percent of the total deaths of men and women conjointly. The same diseases appear to be rare also in the Canadian hospitals, where they occasioned 12.3 percent of the men's mortality and 17.3 percent of the women's. The prevailing types were diarrhea, periodic fevers and rheumatism.

If we take the other points of comparison, supplied by tubercular diseases, we find a remarkable difference in the proportion of mortality in different colonies. Thus, the death rate from scrofula, phthisis and hemoptysis at Free Town, Sierra Leone, amounts to 3.2 percent of the total deaths from all causes among men and 2.3 percent among women. In this hospital other chest diseases give rise to a mortality of 2.4 percent for men. At Cape Coast Hospital no deaths are registered

from any class of tubercular or chest affections. At Durban Hospital and Grey's Hospital, Natal, there was a similar absence of mortality from these diseases. The Ceylon hospitals afforded also only a small mortality, 0.7 percent for men and 1.1 percent for women. There was, however, a mortality of 1.3 percent for other chest diseases among men and 1.7 percent among women. In striking contrast with this comparative exemption from a class of diseases, to which the disappearance of the native races has been to a large extent attributed, we find a very considerable increase in the other hospitals.

At Mauritius the mortality from scrofula, phthisis and hemoptysis was 8.7 percent of the total mortality among men and 3.7 percent among women. Other chest diseases furnish a mortality of 3.6 and 1.8 percent among men and women respectively. At King William's Town Hospital, Kaffraria, the mortality from tubercular diseases, for men and women conjointly, was no less than 70.6 percent of the total deaths, and from chest diseases 11.7 percent.

Both classes of disease afford a high death rate in the Canadian hospitals. For the tubercular forms this amounts to 44.9 percent for men and 41.3 percent for women. The other chest diseases give rise to 30.6 percent of the total hospital mortality for men and 24.4 percent for women. Three fourths of the whole hospital mortality among men, and two thirds among women, were thus due to some form or other of chest disease.

Much has been said and written on the pernicious effects of the use of intoxicating liquors by uncivilized races. Diseases of the brain and nervous system, and liver diseases, are those which, at home, are generally supposed to indicate the greater or less prevalence of habits of intoxication among the people. Let us inquire to what extent admissions and deaths from these classes prevail in the various colonies.

At Sierra Leone brain and nervous diseases occasion 5.7 percent of the total admissions, and 12.7 percent of the total deaths among men, and 9.2 percent of the admissions, with 21.6 percent of the deaths, among women. Liver diseases afford only 0.1 percent of the admissions, and no deaths. Cape Coast Hospital affords an extraordinary contrast to this, for there we find that, although brain and nervous diseases and liver diseases occasion no more than 4.8 percent, and 2.4 percent, respectively, of the admissions, all the deaths arose from them. The Natal hospitals show a proportion of admissions from brain and nervous diseases of 5.7 percent of men and 8.3 percent of women, but no deaths and no admissions from liver disease. The King

William's Town Hospitals, Kaffraria, show no admissions from either class. At Mauritius the admissions from brain and nervous diseases were 3.5 percent for men and 2.7 percent for women, and the deaths 6.1 percent for men and 1.9 percent for women. Liver disease is so rare as to be scarcely appreciable.

A similar remark applies to the infrequency of liver disease in the Ceylon hospitals. In these hospitals the admissions from brain and nervous diseases are 1.6 percent for men and 3.2 percent for women and the deaths 1.5 percent and 3.1 percent respectively. No liver diseases were admitted into the Canadian hospitals and the brain and nervous diseases afforded 6.5 percent admissions, and 2 percent deaths for men, with 5.2 percent admissions and no deaths for women.

These are the statistical results of this inquiry. To the extent to which the data are imperfect, the results are of course unreliable. The numbers are often much smaller than are required for such purposes. I have used them because [they are] the best obtainable, even with the assistance of the colonial governments, and the first lesson they teach is the necessity for assimilating the colonial registration and vital statistics to those at home. But, with all their defects, when these statistics are examined, they bring clearly into light certain great general facts. As regards the schools, they show us that the educational idea in the colonies is just as deficient as it is at home, and that it is attended with worse physical consequences.

No account appears to be taken of the past history of the races on whom it is desired to confer the inestimable blessings of Christian civilization. Our teachers go among them just as they would into English villages. They collect the children who, together with their ancestors, have spent most of their existence in active outdoor habits, into all classes of structures, good, bad and indifferent, apparently without regard to the effect of local conditions on their health. In all probability the children are set together as close as they are placed in one of our home "model schools," without any reference to children's epidemics or other fevers. This is not done without great risk, even with children of English birth. But to do this with children taken from their open-air habits in uncivilized or semi-civilized communities is to incur the immediate danger of losing the most hopeful pupils by diseases, which, under a more rational system, might in all probability be avoided.

The education appears to be confined simply to head work, and no provision is made for sustaining the health by physical training, while it is in danger of exhaustion by a cerebral stimulus, perhaps applied for the first time in the history of the family from which the child has sprung. It is true that cerebral disease forms only a small part of the school mortality, but the diseases from which the mortality proceeds in the tropical schools are the result of overcrowding, defective ventilation and other local sanitary evils, all of which are augmented by sedentary occupation.

The remedy for this is obviously to improve the schoolhouses, to give more attention to space, to ventilation and to the locality where the school is placed, and above all to make physical training an essential and important part of the school system—never forgetting that the habits of generations cannot be suddenly broken through without danger to health and life.

Inasfar as concerns the effect of the schools on the disappearance of native races, the returns contain no appreciable evidence. Education, if properly conducted, together with the improved personal physical and moral habits consequent on it, ought everywhere to be conservative and not destructive, but to be so it should be conducted, as already stated, with a full knowledge of the physiological effects of altered habits and the influence of these on health.

The hospital returns, so far as they can be relied on, show in the tropical colonies a large mortality from diseases arising from bad drainage, bad water, imperfect agriculture, want of cleanliness and from other bad habits. Bad, overcrowded, unventilated dwellings must also in these colonies, as at home, bear their proportion of the blame. Thus mortality arising from mitigable or preventible causes of an external nature occasions in all the colonies by far the greatest part of the death rate in hospitals. Incivilization, with its inherent diseases, when brought into contact with civilization, without adopting specific precautions for preserving health, will always carry with it a large increase of mortality on account of the greater susceptibility of its subjects to those causes of disease which can to a certain extent be endured without as great a risk by civilized communities born among them.

The hospital returns throw little light on the causes of the disappearance of native races, unless these are to be found in the great prevalence of tubercular and chest diseases in certain of the colonies. This is especially remarkable in the returns from Australia, Kaffraria and Canada. But why this class of affections should be so much more prevalent in the temperate than in the tropical colonies could only be ascertained by careful local inquiry. One thing is certain that, in those

colonies from which complaints of the disappearance of native races have come, tubercular and chest diseases appear to occasion the largest amount of hospital mortality.

The discovery of the causes of this must be referred back to the colonies. Anything which exhausts the constitution, above all things, foul air during sleep, will engender these diseases. Open locality, healthy winds, active daily occupation, are by themselves no safeguards if the nights be spent in unventilated cabins. The Alpine climates of Europe are known to be the most free of any climates from this tribe of diseases. But even on their healthy mountain slopes scrofula in all its forms prevails among the peasants, engaged during summer on the high pastures, when they pass their nights in the close unhealthy chalets there. It is possible that a tubercular taint so engendered may be the cause of the whole evil, and it is to this point that the inquiry has brought us.

Appended to the school and hospital returns from each colony, there are very interesting notes giving generally the impression of the reporters on the nature and causes of disease among the aboriginal population. These notes confirm the statistical evidence, but they afford little additional light on the causation.

The decaying races are chiefly in Australia, New Zealand, Canada and perhaps in certain parts of South Africa. They appear to consist chiefly of tribes which have never been civilized enough or had force of character enough to form fixed settlements or to build towns. Such tribes have few fixed habits or none. But the papers show that they are naturally, in their uncivilized condition, possessed of far stronger stamina, and that they resist the effects of frightful wounds and injuries far better than civilized men. This latter fact tells strongly against any natural proclivity to diseased action. But we nevertheless see that, when they come in contact with civilized men, and are, as a necessary consequence, obliged to conform themselves to a certain extent to the vices and customs of their civilized (!) neighbours, they perish from disease.

The evidence contained in these notes unfortunately proves that the pioneers of British civilization are not always the best of the British people. Many of them, it is to be feared, leave their own country stained with vice and vicious habits, ready for any act of oppression, ready to take any advantage of the simplicity of the poor aborigines. Such people have introduced everywhere the use of intoxicating drinks, together with the diseases as well as the vices of their own depraved standard of civilization. Where the races are found most rapidly decaying, there the married women are found living in a state of prostitution and exposed to its diseases. And we know where such is the case, decline and extinction are inevitable.

This appears to be a main cause of the falling off in births, while the other evil habits introduced by Europeans destroy the stamina of the adult population and raise its rate of mortality. With the facts before us, imperfect as they are, we need feel no surprise at the gradual extinction of these unhappy races. But we should draw from them an argument for doing all that can be done to lessen these evils, and to remove, as far as practicable, any causes of disease and death which it may be in our power to remove. Complaint of such things, in some form or other, runs through the whole of the evidence regarding these aboriginal populations, who appear to be far more susceptible of the operation of causes of disease arising out of imperfect civilization than are civilized men (meaning by "civilized" men who can live together in a city or village without cutting each other's throats); how much more so must they be to such dreadful causes as those indicated above!

There is a strong presumption that, if aboriginal races are left undisturbed in their own country to follow their own customs and even their own vices, they will continue to exist as they have hitherto done, in a slowly increasing or stationary condition. But there is no reason to doubt the evidence contained in these papers that certain races require very little disturbance in their primeval habits to pass into a state of decline.

The great question at issue is how this is to be arrested. The facts appear to point to such remedial measures as the following:

- 1. That provision of land should be made for the exclusive use of the existing tribes, but this by itself would be simply preserving their barbarism for the sake of preserving their lives. And the question naturally occurs whether Moravian settlements or settlements conducted on entirely similar principles, under whatever Christian denomination, might not be introduced for the purpose of wisely and gradually winning the people to higher and better habits.
- 2. A good government which really understood its responsibilities would put down with any force requisite that most accursed of all British habits, the sale of intoxicating drinks to those who never knew them before. On the heads of these traffickers rests the blood of thousands of their fellow men.
- 3. Although a large proportion of children have died while under school instruction, there is no proof that education, if properly con-

ducted, tends to extinguish races. And it is possible that by educating outcast native children, these tribes, with whatever mental constitution endowed, may be spared to contribute their quota to human knowledge and advancement.

- 4. The school diseases, however, indicate that education should be conducted in a very different manner from what it is in England. Physiology would teach us that it is not safe to take the child of uncivilized parents, and to submit it all at once to the restraints of civilization. What is wanted is a careful study of what can and what cannot be done with safety. Time would seem to be a great element in the education of these children. There should be as little interference as possible with their born habits and customs. And that interference should take place gradually and wisely. The probability is that, if children could leave school in health, with sufficient training to enable them to enter the pale of civilization, their children would be the more able to bear the required development of the mental faculties. In any case, physical training, and a large amount of out-door work, are essentially necessary to success.
- 5. We all know how difficult it is to preserve health among dense populations in our houses at home. We may hence infer how much more difficult it is to draw together numbers of uncivilized or partially civilized people, within the same boundary, or under the same roof, without great risk to health and life. Bring a healthy family from the open country into a narrow crowded London alley, and the little ones will die, the elder ones will be sick for, perhaps, the first time of their lives, and the parents will fall into confirmed ill health, to say the least of it.

Our home experience hence teaches us the extreme importance of favourable sanitary conditions, whenever an attempt is made to bring the uncivilized within the pale of civilization. Every society which has been formed has had to sacrifice large proportions of its earlier generations to the new conditions of life arising out of the mere fact of change. Only by the greatest care and by the adoption of every requisite improvement can London itself bear the rapid increase of its population without danger from pestilence.

This destroying principle is now at work in the colonies where races are decaying. And its results can only be diminished by assimilating the new conditions, involved in the change, as nearly as possible, so far as healthiness is concerned, to the open-air activity to which the people have been for generations accustomed.

These are the results of this inquiry. Defective in many particulars

though they be, they are still sufficient to prove that, on the local authorities of the colonies, there rests a responsibility in the face of public opinion in Europe, of the very gravest kind. It is a matter for state interference. It is impossible to stand by while races are disappearing, of which it can be said that the "Australian is the finest model of the human proportions in muscular development," that his "head might compare with an antique bust of a philosopher," that his "perceptive faculties are peculiarly acute," that he is an "apt learner," and "possesses the most intense desire to imitate his more civilized brethren in almost everything," that the Australian aborigines are "possessed of mental power on a par with their brethren of the other races of man, that they are perhaps superior to the Negro and some of the more inferior divisions of the great human family," that they have "keen perceptive faculties, with a considerable deficiency in their reflective faculties and a certain want of steadiness of purpose in their characters, which appears the great obstacle to be overcome in reclaiming them and bringing them within the pale of civilization and Christianity."

These statements are from a report on the subject, made by a select committee of the Legislative Council of Victoria in 1858-59. In this report occurs the following passage, with which I conclude on account of its authority, appealing from its facts to the better feeling of the colonies, with the hope that the time is not far off when such a stigma as it affixes to the empire may be wiped away:

The great and almost unprecedented reduction in the number of the aborigines is to be attributed to the general occupation of the country by the white population, to vices acquired by contact with a civilized race, more particularly the indulgence in ardent spirits, and hunger, in consequence of the scarcity of game since the settlement of the colony, and also, in some cases, to cruelty and ill-treatment. The great cause, however, is apparently the inveterate propensity of the race to excessive indulgence in spirits, which it seems utterly impossible to eradicate. This vice is not only fatal, but leads to other causes which tend to shorten life.

Mr Thomas, the Guardian of Aborigines, states in evidence that one morning he found five drunken blacks lying buried in the mud at Merri Creek which, being followed by pulmonary attack, death, as is invariably the case, ensued. It may be remarked that consumption forms a fruitful cause of mortality amongst them, in addition to the other causes enumerated.

It would appear that they have materially degenerated since the advent of the whites, as Mr Thomas has said: "The young die two to

one in proportion to the old; I have some old people yet." The rapid settlement necessary upon the country being occupied by flocks and herds was more unfavourable to the aborigines than if it had only been gradually taken up for agricultural purposes.

Your committee are of the opinion that great injustice has been perpetrated upon the aborigines, that, when the government of the colony found it necessary to take from them their hunting grounds and their means of living, proper provision should have been made for them. Had they been a strong race, like the New Zealanders, they would have forced the new occupiers of their country to provide for them, but, being weak and ignorant, even for savages, they have been treated with almost utter neglect.

With the exception of the protectorate, which was an emanation of the Imperial Government, and which seemed to have been only partially successful, little or nothing has been done for the black denizens of the country.

Every colony where the native races are declining could furnish some such report as this. The injustice has been a common one and so should be the remedy.

"Note on the New Zealand Depopulation Question"

Editor: Nightingale's "Note on the New Zealand Depopulation Question" is dated 1860 in Cook's bibliography, but with a query as to whether it was ever published (2:440). The paper, written at the request of Sir George Grey, was mentioned by him in an address on the Auckland Free Public Library delivered at the Theatre Royal, Auckland, 1883. A copy was subsequently deposited with the Auckland Public Library with other Nightingale correspondence. Possibly the writing of this note preceded the more extensive article above. Cook also lists a "Note on Causes of Deterioration of Race," a short paper, also probably printed in 1860, but not published. No trace of this last paper has been found.

Source: Note on the New Zealand Depopulation Question, Auckland GL/N8/2 att., copy British Library Add Mss  $45795\ \rm ff244-45$ 

[1860]

There are no sure grounds either in the census return or in Dr Thomson's book<sup>14</sup> for any *practical* opinion as to the causes of increased

<sup>14</sup> Arthur Saunders Thomson, The Story of New Zealand: Past and Present, Savage and Civilized.

mortality among the aborigines. The chief practical fact (as to depopulation having taken place) is that the 1858 census shows a population of only 56,000 among a people whose settlement in the country took place centuries ago. No causes with which we are acquainted in the few years of effective European intercourse which have elapsed could have reduced the population from its antecedent strength (supposing such antecedent strength to have existed) to one of only 56,000, after 1000 years of occupation.

All the American tribes are not decreasing. Some are increasing. Decrease therefore is not a universal law when savages come into contact with civilization.

With regard to diseases, the information is defective. Dr Thomson shows, in his seventh table, that chest diseases prevail more among the New Zealanders than among our entire English population. But it is impossible, in the absence of all information as to ages, etc., to state what the excess really is.

The introduction of pigs, as an article of food, has been certainly one cause of evil. Bad habits, filth, laziness, skin diseases and a tendency to worms and scrofula are results of the excessive use of swine's flesh, containing entozoa, which all improperly fed pork is liable to contain. The pig is, of all animals, the de-civilizer. Ireland and New Zealand both suffer under the incubus of pigs and potatoes. But in Ireland, although there is high mortality, there is also a large increasing power. Dr Thomson is therefore wrong about the effect of potatoes. . . .

The New Zealander suffers from:

- 1. fever:
- 2. chest diseases:
- 3. bowel diseases:
- 4. skin diseases:
- 5. scrofula:
- 6. rheumatism.

1 and 2 should be met by improvements in his dwelling and in his amount of active exercise, 3 and 4 by improvements in diet and personal habits, 5 and 6 by clothing and house accommodation.

Native huts afford but about 200 cubic feet to each occupant and are without regular ventilation. This would produce, in our Army, regular fever and consumption. The remedy is some public step for improving the models, dimensions and ventilation of native huts. We do this by societies. Could the same be done in the colonies?

Other points in regard to food, habits, clothing, etc. can only be

met by the advance of civilization.

Education: Uncivilized man cannot be dealt with in the same way as civilized man. Even here, education means keeping a certain number of children a great part of each day in a close room, cramming and exciting them with formulae. Clever breadwinning, stunted growth, high mortality are what we produce. But this system would be fatal to a race subjected to it for the first time. In their children it produces bad health, scrofula, consumption, and is in reality death with slow torture.

At home, we find that as much (or more) is taught in three days as in six (or in six half-days as in six whole days), the physical system being developed by exercise or work in the other three days (or six half-days). This is the clue to all proper school management, especially among the uncivilized. If a child's brain is forced, whose father's brain has been free, the child dies. Children are killed by school discipline. In an aboriginal school there should be ample space, free ventilation, cheerfulness, half-time at least given to outdoor work or play. The education must have day-by-day reference to the past habits and history of the people. The object should be to draw them gradually into better habits and gradually to civilize them. This is still more the case in religious than in school training, for religion produces a yet more rapid change in all the habits and objects.

We see every day (among the civilized) disease and death produced by too rapid a change in religious habits. How much more among the uncivilized! Bodily activity on all useful objects is especially required, therefore, among converts from heathenism and the active life of heathenism. Without it, the best men among the converts will fall under disease and thus become lost to the cause of Christianity. This cause necessarily withdraws them from a sphere of vicious activity. A sphere of *useful* activity must be substituted for it (if they are to live).

A short sketch of the constitution of the schools [attached]:

- 1. The usual duration of the school education;
- 2. What it consists of:
- 3. The amount of (1) play; (2) outdoor work; (3) holiday;
- 4. What proportion, if any, leave before the completion of their
- 5. What proportion, if any, leave from ill health?
- 6. What proportion, if any, leave to die out of school?
- 7. Whether the children are paid for and by whom?

#### Correspondence on Colonial Schools and Hospitals

Source: Letter, Auckland Public Library GL/N8, typed copy British Library App Mss 45795 f241

30 Old Burlington St. 12 April 1860

Dear Sir George Grey

I send you a copy of the new "Army Medical Regulations," which please keep. Also I enclose *for your criticism* a form of return (which Dr Sutherland and I have made) for the native schools, which, if it could be filled up, would give us all the information we want, in order to enable us to judge of the influences which deteriorate the children's health. Would you strike your pen through any heads which from your knowledge of the existing data could not, you believe, be filled up, as it is no use perplexing the people with these?

A general account of the school discipline, as to hours, etc., must be appended to each return (in order to enable us to judge) which, I take for granted, there would be no difficulty in obtaining. Would you be so good as to return this form to us (with your remarks) and we will forward it with a hospital form to the Duke of Newcastle.

yours sincerely

F. Nightingale

We are reading  $Fenton^{15}$  and Thomson.

Source: Letter by Sir George Grey, ADD Mss 45797 ff108-09

14 Park Lane 13 April 1860

#### Dear Miss Nightingale

... I send you back the proposed return for native schools. There will be no difficulty in obtaining the information you ask for and I cannot suggest any improvement in the return which seems complete. I hope now some advance will be made to the solution of a question, which is for us as a nation of such great importance....

very truly yours

G. Grey

<sup>15</sup> F.D. Fenton, Observations on the State of the Aboriginal Inhabitants of New Zealand.

Source: Letter, Auckland Public Library GL/N8/2, typed copy British Library ADD Mss 45795 f241

> 30 Old Burlington St. 16 April 1860

My dear Sir George Grey

We have only succeeded in drawing up for you what you do not want to have, viz., a few notes without much practical suggestion, for indeed the facts before us are not practical enough to warrant us in laying down anything more definite. The aboriginal question is still unsolved and I believe it rests with you to solve it.

Thomson and Fenton give not much practical result. On the other hand, we are actively going on with our forms for the Duke of Newcastle. And, as you said yourself, that in a question of this importance a few months more or less did not matter. We trust that your result will be the surer for being delayed. We thought of sending (with the school form) some questions like the enclosed. Do not trouble yourself to make any answer if they will do. But, if all schools are pretty nearly on the same basis as to these questions, perhaps you could find time to tell us so. God bless you for all you are doing for these fine races.

ever yours sincerely

Florence Nightingale

I am in communication with Mr Herbert about your sanitarium.

Source: From a letter to Sir George Grey, Auckland Public Library GL/N8/3, typed copy British Library Add Mss 45795 f242

26 April 1860

I have been printing certain forms for your school and hospital colonial purposes. I now send for your criticism the "schools" one. Would you say if there is anything important omitted? Would you say if the title ought to be as it is, "Colonial Boarding Schools," or simply "Colonial Schools." Are there such things as day schools for the natives? And if so, ought they to be included?

The Duke of Newcastle will immediately send out these forms. I think the description of the "consistent Christian" in Thomson's New Zealand (2:249-52) goes far to explain why New Zealand Christians die. What idiots the missionaries, not the converts, must be!

Would you like the inquiry to be carried any further? For example, do the native women cease to have children? (The Jesuits in South America have often found this obstacle to their trials of civilizing the natives.) Does scrofula or any other specific disease exist among mixed races of (a) white and black blood, (b) white and brown blood to a greater extent than it exists in the races separately in the same colony or district? This is an important question. . . .

ever yours sincerely

F. Nightingale

I rejoice to hear that Lady Grey is going out with you and that you are better.

F.N.

Source: Letter by Sir George Grey, ADD Mss 45797 ff110-13

14 Park Lane 27 April 1860

My dear Miss Nightingale

I will answer the several questions in your letter of yesterday's date as well as I can.

I think it would be better the title should stand: "For Colonial Schools" because in all large villages there are day schools regularly attended by the children, who house with their parents who are more or less under missionary control. I think also that the title should run "Exclusively or Principally Attended by Native Children," because in nearly all these schools some few Europeans or half-caste children are admitted, although the number of these is so small that the school really remains a native school. Perhaps you may think that this will require some corresponding classification in the return to show the different vices [races?].

I cannot suggest in what manner the inquiry should for the present be carried further. The native women do not cease to bear children but their families are small, I believe smaller than when they were in an entirely barbarous state.

I think it might do good to ask that the governor of each colony might be requested to ascertain, as accurately as he could, the questions which you propose as follows: "Does scrofula or any other specific disease exist among mixed races of (a) white and black blood; (b) white and brown blood to a greater extent than it exists in the races separately in the same colony or district." I am afraid if this question was proposed indiscriminately to a large number of persons they would each form the crudest opinion upon quite insufficient data and then unhesitatingly give this opinion—the result of their opinions so given would only mislead. But I think the governors might obtain careful and well-considered opinions on this subject.

I have now replied to all your questions. I think those proposed at the end of the return are excellent ones, and I believe and hope that,

as a result of this inquiry, you may be able to devise some means which may enable us assure civilization, without entailing upon native races so large a loss of life as we have hitherto done.

Your note on the New Zealand de-population question has been to me a paper of the greatest interest. I will immediately communicate with Colonel Brown, the governor, on the object. It is curious in regard to what you say regarding the introduction of the pig as an article of food, that the Negroes [?] in South Africa, who have increased in number since they have come into close contact with civilized man, have always sturdily refused to make pork a common article of their diet. I will write to you again on this point when I sail the Cape of Good Hope, but I have now no time to write more as we start early tomorrow morning. I thank you so much for what you say about Lady Grey16 going out with me. Her being well enough to do so has made me very happy. We both of us earnestly pray that God may be pleased yet long to spare you, to prosecute your so useful and benevolent labours. Believe me,

very truly yours

G. Grey

Source: Letter, University of Nottingham Nec 10,937, Newcastle Collection

30 Old Burlington St., W. 22 May 1860

Dear Duke of Newcastle

Without troubling you with apologies, I venture to recall to you your former kindness to me, in the hope that you will not consider it an impertinence if I ask you, through the Colonial Office, to further what I believe to be a very important interest of our country, viz., how we can civilize without destroying the natives of our colonies?

I enclose particulars of what I venture to hope you will do for me. My object is to gain information only for a practical purpose. Believe me to be,

Your Grace's obliged and faithful servant

Florence Nightingale

May I ask a farther question whether, as you have appointed delegates for our colonies at the International Statistical Congress to be held in

<sup>16</sup> Lady Grey indeed left with her husband but he put her off the ship in Rio for suspected adultery; Grey's biographer Edward Bohan, in To Be a Hero: Sir George Grey (1812-1898), concluded that she was very badly treated (189-95) and that the public scandal over the marriage break-up (he never saw her again) changed his personality.

London in July, a delegate for the *Cape of Good Hope* has been appointed?

Source: From a typed copy of briefing note to the Duke of Newcastle, State Library of New South Wales

22 May 1860

Note as to an Inquiry into Native School and Hospital Sickness and Mortality: Among the serious questions connected with my hospital work has been the *very high rate of mortality* among the aboriginal inhabitants of our colonies, and the great prevalence of certain classes of disease, such as scrofula and consumption, among those converted to Christian civilization. The question is so serious that it seems to amount to this: can we civilize these people without killing them? As it is, we and our civilization seem likely to cause the extinction of whole races and tribes.

I know the interest Your Grace has long taken in questions affecting national health, and I trust that you will perhaps approve two forms of return which I have had prepared:

- 1. To show the sickness and mortality in *schools* attended by *native* children;
- 2. To show the diseases for which *natives* are admitted into colonial *hospitals*.

I venture to enclose a copy of the "school" form and to ask, if you approve of it, whether it would be possible for the Colonial Office to send both "school" and "hospital" form to each colonial governor, and to direct that they should be filled up and returned to me for reduction. I have had 500 copies printed. I would put them up in any way which would give the Colonial Office no other trouble than that of directing the packets and sending a letter of instructions to the governor of each colony.

The chief colonies suitable for the purpose would be: Ceylon, New Zealand, Australia, Cape of Good Hope, West Coast of Africa. The American Indian schools in *Canada* would give good information if it is to be had. Missionary schools have the best observed data. The governors are, however, the most competent judges.

The object of all this is a practical one. I have not unfrequently been applied to to give sanitary advice for these children, who are dying off under our instruction. Without more precise information it is impossible to give really useful or definite advice. Copies of any printed reports giving information on the *native* school attendance, sickness and mortality, which are in possession of the Colonial Office and which it would furnish to me, would be a valuable help.

(signed) Florence Nightingale

Source: From a typed copy of a letter to the Duke of Newcastle, State Library of New South Wales 60/Q8107

15 June 1860

I deeply regret that there should have been any delay in sending the forms for the colonial schools and hospitals, after the great kindness of Your Grace in offering to send them out to the colonies. The delay has arisen from the fact of the hospital forms having only just arrived from the printer. They have taken more time to prepare than was anticipated.

In order to form some estimate of the number of school forms required, I obtained reports of various missionary societies, from which I learn that in the colonies whence it is desirable to have returns, there are nearly 500 native day schools. From all these schools it is not necessary to obtain returns. But it is requisite to have a sufficient number of data to form a conclusion on the question of the causes of aboriginal decrease of population. Instead, therefore, of sending the fifty copies which Your Grace has been so kind as to desire, I have ventured to put up the school and hospital forms (with a covering instruction) in packets addressed to each colony for Your Grace's approval.

Further, Sir G. Grey (of the Cape) suggested, as a means of obtaining comparable data, that forms should be sent to some of the South Sea Islands, where there are above 800 missionary schools, mostly in the Samoan and Society Islands. I do not know whether I ought so much as to suggest to the Colonial Office if it were possible for these to be sent? But if Your Grace should consider it so, might I send a packet of forms for these?

For any other colonies than those in the enclosed list to which the Colonial Office would send forms, I should be most desirous to supply copies. I have not yet received the collection of papers on the subject of aborigines from the Colonial Office which Your Grace was good enough to direct to be made for me. I beg, etc.

(signed) Florence Nightingale

Source: Typed letter or copy from Duke of Newcastle, State Library of New South Wales ML A2368, "Behar" 60/8107 10th September 1860 1047. Circular

> **Downing Street** 7 July 1860

Sir [Henry Barkly, 17 KCB, governor]

I enclose a copy of a memorandum which I have received from Miss Florence Nightingale with some forms of returns which she is desirous

<sup>17</sup> Sir Henry Barkly (1815-98), governor of New South Wales.

should be filled up with information on points there detailed, as calculated to show:

- 1. The sickness and mortality in schools attended by native children, and,
- 2. The diseases for which natives are admitted into colonial hospitals. Miss Nightingale's labours are so well known and their utility so well established that I am sure it is unnecessary for me to point out how desirable it is that she should, in this case, receive every assistance which can be afforded to her by the means within the reach of your government. And I would add that it will be gratifying to me that the information desired should be furnished in as clear and complete a form as possible. I have the honour to be, Sir,

your most obedient humble servant

Newcastle

P.S. Since writing the above I have received a further communication from Miss Nightingale with some tabular forms which I transmit for your more complete information. *Circular 7th July 1860*: Requesting information as to the sickness and mortality in native schools and as to diseases for which natives are admitted into colonial hospitals.

Minuted: Refer to the Hon the Chief Secretary, with a request that he will bring this matter under the notice of the Board for the Protection of the Aborigines, although it is to be feared that little information is obtainable. . . .

Source: Letter, Boston University 1/2/28

Hampstead N.W. 26 September 1861

Sir [William Robinson]

I beg to acknowledge your letter of the 24th, enclosing a return from the Borella Lunatic Asylum, Ceylon. And, in offering my thanks for this, I beg to reiterate my acknowledgments for the Ceylon native school returns (previously sent me on the 6th), which are of immense value in determining the question as to how native children and races can be civilized without being destroyed.

The returns are so voluminous, and must have cost so much labour, that I should be almost ashamed of having asked for them, were it not for the great importance of the question, which I believe has occupied the Duke of Newcastle personally. I am, Sir,

your obliged and obedient servant Florence Nightingale Source: Letter, Wellcome Ms 5474/56, typed copy ADD Mss 43399 f77

Hampstead, N.W. 13 September 1862

My dear Dr Farr

You may perhaps remember (or more likely you may have forgotten) that the Colonial Office employed me, or I employed the Colonial Office (which is the more correct?), to come to some conclusion about the relation between education and mortality in our uncivilized colonies: how far can we educate savages without killing them?

I send you the Ceylon school papers, with three forms, which I enclose, and ask you to be so kind as to criticize the forms as to whether they are fit for tabulating the facts for use, comparing them with one or two of the returns, and also then to put the returns in hand at your office, I of course paying therefor. I hope you yourself will take no farther trouble than just to look over the forms. And you will eternally oblige,

yours very truly

F. Nightingale

Source: From a letter to W. Clode, Royal College of Nursing, Edinburgh RCN/ FN1/5

28 November 1862

I am extremely obliged to you for the winding up of the colonial (hospitals) tables. With all the drawbacks which you so justly point out, they tell more than any papers I have, or have seen, as to native diseases and conditions in those colonies. Believe me.

yours sincerely

F. Nightingale

Editor: Nightingale's paper was read at the meetings of the National Association for the Promotion of Social Science in Edinburgh 1862 and duly printed in the proceedings. A resolution was unanimously adopted at the meeting of the Public Health section, to "request the council of the National Association for the Promotion of Social Science to represent to the Colonial Office the importance of considering the valuable reports of Miss Nightingale on native colonial schools, native colonial hospitals and the causes of the disappearance of native races in British colonies, and that they also represent the desirableness of endeavouring to obtain additional information respecting native races."<sup>18</sup> She proceeded with her own efforts to get further information and commitment to action from the authorities.

Source: From a letter to the Duke of Newcastle, University of Nottingham Nec 10,938, Newcastle Collection

23 May 1863

You will perhaps remember that, three or four years ago, under your authority, and with your assistance, I began (at the instance of Sir George Grey of New Zealand), an inquiry into colonial school and hospital mortality. It has been a very unsatisfactory one from the incomplete nature of the materials, which indeed was acknowledged in almost every return from colonial authorities, which you had the great kindness to forward to me.

After great labours (to which I have given the time I could spare from business for two years), I have managed to reduce the results of this very extensive inquiry into the accompanying pages. It is incomplete and therefore inconclusive. I have ventured nevertheless to send you a proof, hoping that you will glance over it. The most I expect from it is a beginning, to be followed by local inquiries, which may eventually turn to good. Colonists are not generally informed in such matters, but there may be a few men here and there who will take the trouble to follow up the course I have indicated. Sir G. Grey is certainly one of these, although no returns whatever of the least value to this inquiry have come from New Zealand.

(Quite different has been another inquiry on which I have been engaged for the last four years, the "Indian Army Sanitary Commission," where the materials are so complete, the returns received so full, that the conclusions were clear and complete also. I would, if permitted, send you my paper on the Indian subject.)

May I ask that the (colonial) proof, herein enclosed, may be returned to me, with any remarks, as soon as you can do me the favour to send them, as the printer wants to get the proof off his types, and I to get it off my time? Believe me,

Your Grace's faithful servant Florence Nightingale

<sup>18</sup> Summary of Proceedings, Transactions of the National Association for the Promotion of Social Science (Edinburgh 1862):557.

Source: From a letter to the Duke of Newcastle, University of Nottingham Nec 10,939, Newcastle Collection

17 June 1863

Miss Nightingale presents her compliments to the Duke of Newcastle. Three or four weeks ago she took the liberty of sending him an uncorrected proof of a paper she had drawn up on the results of the statistical inquiries which the Duke of Newcastle was so good as to carry out for her in the colonial native schools and hospitals.

Miss N. feels very desirous of coming to some decision about this paper. And she would be greatly obliged if the Duke of Newcastle would kindly return the proof, with any remarks which may have occurred to him, if he has had time to glance over it.

Source: From an incomplete letter to the Duke of Newcastle, University of Nottingham Nec 10,940, Newcastle Collection

30 June 1863

I do not know how to thank you for all the trouble you have taken about these colonial statistics, for the care with which you have looked into the results and for your kind offer of farther assistance. I only hope that it will bear fruit under your administration. All that I expect from my little part of this inquiry is that, by showing how faulty it is, it will stir up the colonists to further a more accurate inquiry. I shall gladly accept your kind proposal to send out copies to the colonies of my little abstract, especially to Sir G. Grey of New Zealand.

I do not pretend to have fathomed the mystery of the disappearance of races. On the contrary, I sadly feel that I have scarcely made a step towards it. All I tried for was to see whether any statistical data could be had which would throw light upon it. I have done my best to use these. But, as I say, the sole result I expect and hope for is that some few colonial governors will take up the subject and carry it out. The main question, viz., the disappearance of uncivilized races, is one of great difficulty to solve. It appears as if men were endowed with only a certain amount of vitality in the family and that, according as they use the gifts, so is their fate.

I am acquainted with the class of facts you mentioned as to the appearance of diseases after contact with Europeans. Curiously enough, the most marked case of it is at St Hilda, where the people assert that they always have influenza after a boat comes to them from the mainland. Here the same race is supposed to convey the disease. But, after all, is it a fact? Boats and ships arriving at any point are in the nature of periodically recurring facts, always noted in the memory of people who have few events to remember. If a severe disease appears after an arrival they are sure to remember the two facts in connection. But, if no disease occurs, they are sure to forget this fact.

Again, if disease comes without the arrival of a vessel, rude people have nothing to connect the occurrence with and it is forgotten. Diseases and eclipses used to stand as effects to causes, in semi-scientific observations during the Middle Ages. It is the usual error of quarantine reasoning. In this, as in many other points, we require well-observed statistical facts of all kinds. The passage about the "Australian" type, to which you refer, is taken from one of the reports which [breaks off]

Source: From a letter to Sir George Grey, Auckland Public Library GL/N3/4

28 July 1863

I daresay you have forgotten our conversation about the disappearance of native races, it seems to me so long ago. Since then I have lost Sidney Herbert, my dear chief, and all my fellow workers with whom I began the work of Army sanitary reform. Not one remains except Dr Sutherland, whom you may remember. I long to follow them. My health is so bad that, since the beginning of the year, I have not left my room, and yet I have survived them all.

I have not forgotten your desire and I have employed for two years every spare moment in working up and reducing with immense labour the materials furnished by the Colonial Office. I never did anything so unsatisfactory. The inquiry has been carried out with all the machinery in the possession of the Colonial Office. I hoped to have solved some problems for you, but here is the result. It is so imperfect that I scrupled as to making any use of the data. The result has really none but a kind of negative value which I am going to show. Very few of the colonies furnished any information. New Zealand sent none. The only explanation is that the subject has never hitherto been considered at all.

The negative value is twofold: (1) showing that the whole school system in the colonies is conducted on the same imperfect model as at home; (2) that statistics are not in any sense applied to school questions. If this paper called attention to the fact, and leads (1) to a better system of conducting school business; (2) to a better system of registration, it is nearly all it will do.

One practical result follows from the school inquiry, viz., that school training, if properly conducted, need not be injurious but the reverse, as also that the mortality is mainly caused by preventible diseases, just

as it is in our schools at home. The main conclusion is that physical education is absolutely necessary and that better schoolhouses and more regard to sanitary conditions are indispensable.

I hear that you are building a hospital. Everything will depend on how you build it. If I can be of any use with advice, it would be the greatest pleasure I could have. I have a book on hospital construction [Notes on Hospitals] in the (proofs) and will send you a copy. I have been engaged in another inquiry, the India Army Sanitary Commission's, where our materials were as full as they were meagre in the colonial case. I send you a copy of a paper of mine printed in their report, which enables one to judge of the extent to which British soldiers and British people ignore the laws of nature in warm climates, and then blame everything and everybody but themselves for the result.

I remember you were interested in the question and proposed the Cape for a sanitorium. I also send you a copy of a paper of mine on how Sidney Herbert halved the death rate of the British Army at home.

God bless you. I wish I could have helped you more. You will do a noble work in New Zealand, but pray think of your statistics-I need not say, think of your schools. But people often despise statistics as not leading to *immediate* good. Believe me,

yours ever sincerely, Florence Nightingale

Source: From a letter to the Duke of Newcastle, Flintshire County Record Office, Glynne-Gladstone Mss 2983 ff33-36

28 July 1863

I have the pleasure of sending you a copy of my paper, or rather yours (since you were so good as to supply the materials) on colonial school returns. Should you have occasion for any more copies, I shall be very glad to furnish them. You were so kind as to write that you would wish to send out copies to the colonies. If you will give orders to have them received at the Colonial Office I will send them tomorrow, put up separately and the names of each colony put on the packet, with different numbers to the different colonies, according to their size and population.

If you thought well, I would venture to suggest that the principal, if not the only, usefulness of this paper would be given by your desiring some kind of circular to be written with it, to the effect that, as you called for the returns, you wish now to lead the way to more correct statistics and to direct the attention of the governor to the fact that, after every care has been exercised in obtaining the statistical data,

but a few colonies only were able to send any, and even those returns which were made were very incomplete. (Indeed if you take the trouble to look at the tables, A and H, pp 20 and 30, you will see that the information received from Ceylon is the only information which has any pretension to completeness.) Also would you think well to direct the attention of every governor to the great advantage of schools, hospitals and other institutions keeping more complete data?

I intend with your permission to send some copies of my paper to the missionary societies here, who may be stirred up by some facts in it to adopt practically in their schools—the proposals as to physical education. I greatly regret that New Zealand has sent no facts whatever bearing on the subject, as New Zealand might make more progress in that way than almost any other colony.

May I venture to send you a copy of a paper I wrote for the Indian Sanitary Commission? It may interest you and it shows faithfully the present state of things in the Indian stations to which those in Ceylon bear a close resemblance. It enables one to judge of the extent to which British soldiers and British people ignore the laws of nature in warm climates, and then blame everything and everybody but themselves for the result. Believe me,

Your Grace's faithful servant Florence Nightingale

Source: Letter to an unknown recipient, Alexander Turnbull Library, Wellington, New Zealand

> Hampstead N.W. 3 October 1863

Dear Sir

I return your paper, with many thanks. My "Colonial School and Hospital" report is to be read itself at Edinburgh. 19 The reason is that it refers to subjects and consequences of much greater extent and importance than the school question. Mr Chadwick is to get up a discussion upon it, as mixed physical and mental training has been so much a question with him at home. And I trust you will say thereon what you propose saying, as it is perfectly impossible for me to pursue this subject, which yet I consider scarcely begun, overwhelmed as I am by War Office and hospital business.

I trust that you and others, more efficient than I, will take it up. I did it only at my leisure moments, at the desire of the governor of

<sup>19</sup> At a meeting of the National Association for the Promotion of Social Science.

New Zealand, not at my own. And, with the whole machinery of the Colonial Office kindly placed at my command, I consider that (as I have stated at the beginning), the data obtained are so imperfect that the best result of the paper will be to urge others on to the inquiry into the great question of the causes of the disappearance of native races.

I was perfectly appalled at the want of definite data, as of accurate inquiry, into this great subject, when I came to inquire. And it is this, I think, which you and others must remedy.

yours very faithfully Florence Nightingale

Source: From a letter to Annabella Milnes, Trinity College, Cambridge, Houghton Collection unnumbered

Dear Mrs Milnes

13 January 1864

I cannot call you anything but the "dear old name." <sup>20</sup> I enclose you a letter from the governor of Ceylon, which I thought you might like to see; it speaks of your husband so affectionately. My correspondence with him was merely on colonial sanitary subjects, through the Duke of Newcastle. And I confess I forgot having ever seen him.

The sanitary statistics of schools, etc., from Ceylon were the only good colonial ones—the other colonial governors having completely failed in this point—the unpardonable sin in my eyes. Please return me the letter enclosed.

ever yours

F. Nightingale

Source: From a letter to Miss Craig, Boston University 1/3/39

14 January 1864

I have struck off the appendices and made some verbal alterations so as to make the paper to "read without." I am afraid it cannot be abridged—the last page only could be left out, and that would be a pity, for it contains the confession of the colonists that they have been and are killing the natives. Please to send me a proof for revisal.

yours most faithfully

F. Nightingale

<sup>20</sup> Annabella Milnes (1809-74), who had become Baroness Houghton in 1863 when her husband, Nightingale's former suitor, Richard Monckton Milnes, accepted a peerage.

Source: From a letter to Sir George Grey, Auckland Public Library GL N8 (5), typed copy Add Mss 45795 ff243-45

3 March 1864

I send, by the kindness of the Duke of Newcastle, through the Colonial Office, some articles by a M de Quatrefages of the Académie des Sciences, at Paris, upon the Polynesian races.<sup>21</sup> As you are nearly the only governor, except the great Sir John Lawrence,<sup>22</sup> who have condescended to qualify yourself by learning the languages, the physical habits, the ethnological peculiarities of the races you had to govern, I thought it might please you to see a French appreciation of your labours. May these labours be rewarded at last by the civilization of New Zealand!

ever yours sincerely Florence Nightingale

Source: From a letter to Harry Verney, Wellcome (Claydon copy) Ms 9001/60

Hampstead 17 September [1864]

I am going to send a mere note to the York meeting containing an extract from an excellent missionary (R. Catholic) school report in Australia. This is all. It is not a paper. I do not know whether you are going to the York meeting. It is certainly not worthwhile for anyone to go to read this scrap. I merely write this in answer to your question, when I last saw you and you were so kind as to say you wished to read any paper of mine.

ever yours

F.N.

We are quite terrified about the Bermuda yellow fever, brought on themselves by the sinful (Colonial Office) carelessness. I have seen Sir James Hope's despatch to the Admiralty. (Sir J. Hope is not at Bermuda.)<sup>23</sup>

Source: Unsigned, incomplete letter, Wellcome (Claydon copy) Ms 9001/8

Dearie and Primate of all the Bishops [Parthenope Verney]

[1864]

Under cover, to you at 9 St James' Place, now lie for your rebellious brother the bishop of Natal and for your admirable brother the bishop

<sup>21</sup> Armand de Quatrefages, probably his Les Polynésiens et leurs migrations.

<sup>22</sup> John Lawrence (1811-79), viceroy of India.

<sup>23</sup> James Hope (1808-81), admiral, commander in North America and the West Indies.

of Columbia,24 whom I should much have longed to see, a copy of my paper on sanitary statistics of colonial schools, etc. Perhaps you would explain that the only result of it is a negative one: (1) keep your statistics better; (2) make physical education a sine qua non in your native schools, and the only result of the paper is not to teach people but to direct their attention to these things.

It seems as if this were the very first attempt at statistics of this kind ever made as to the colonies. For if I, with all the machinery of the Colonial Office, have got at this only, the material cannot exist. I have promised that there shall be no circulation of the paper, except the copies which the Duke [breaks off]

Source: Letter to unknown recipient, with portion removed, Boston University 1/4/49 London

20 March 1866

Private

My dear Madam

I should be quite unpardonable if I had not answered your letters before from neglect. But I hope you will know that the very reverse has been the case. I did not lose an hour in putting your invaluable information and papers into the proper hands (not those of the Colonial Office, which I had tried before in former years<sup>25</sup>). I also communicated to these gentlemen your last, dated 22 December 1865. I know that they have taken action upon this information and I am to hear farther from them. Whenever I do I shall of course communicate with you. I hope you will find that, besides your other inestimable labours, this also will have borne some fruit.

I do not think that I should do any good by communicating (as to "matters of detail and method of management") directly with the officers of the Sydney (Tasban) Asylum, with my comments upon your "papers," as you invite me. Everything depends upon the classes of cases, construction, etc., and I might do absolute harm. I trust you will believe that I have done everything in my power [four lines cut out].... Pray believe me, dear Madam, with overflowing wishes for your complete success, complete as you deserve.

ever your faithful servant Florence Nightingale

<sup>24</sup> George Hills (1816-92), first bishop of (British) Columbia, where Edmund Verney was stationed.

<sup>25</sup> No action was taken on Nightingale's urgent pleading in 1863 to the Duke of Newcastle.