GOLD RUSH AND HEALTH

Aspects of Victoria's public health in the 1850's

R. J. Pryor

On examining living conditions in Victoria in the 1850's, one finds the existence of conditions hardly conducive to a rapid advance in the level of public health. Towns were overcrowded, streets undrained, unpaved, and littered with all types of refuse, sanitary laws were non-existent at the beginning of the decade, water supplies impure, and food commonly adulterated.

To remedy these crude and insanitary conditions, the N.S.W. Legislative Council had established the Melbourne Town Council in 1848. However, it was to be sixty years before Melbourne was to get an adequate system of hygiene; but there was at least a body accepting some responsibility for civic cleanliness.

The medical profession was active in advocating a clean environment by attention to drainage, sewage, water-supply and ventilation. The doctors diagnosed certain social conditions as dangerous to the health of the community, and rightly argued that only the State could force these conditions to be removed. Despite the embryonic stage of some of their theories—at the time they were arguing whether typhoid and other diseases had their origins in spontaneous generation in effluvia, or whether diseases spread through contagion—nevertheless by public speaking and pressure on Parliament, they managed to make Victorians aware that a dirty environment encouraged illness.

Social conditions, in a state of normal population growth, were of far too low a standard. Yet at this time, with the rush to the gold-fields, population growth was far from normal. Victoria's population rocketed from 97,481 in 1851, to 168,321 in 1852, 222,436 in 1853, and to 537,847 by 1860, while that of Melbourne rose from 23,000 to 140,000 between 1851-61. This was an annual average increase of 50.8 per cent, with a rate of natural increase around 2 per cent. Consequently the gulf between population and provisions for safeguarding public health was to widen considerably.

Food supplies were often adulterated. One analysis indicated copper in raspberry jam, plaster of Paris in flour, alum in spirits, lead in confectionery, slops in beer, and a 'remarkable list of suspicious substances in coffee'.

In the early '50's water was obtained in carts from the Yarra, at a cost of 3d. per gallon, 'the said Yarra having the pumps just below where the horses are washed, and numerous wool-washing establishments being higher up the river'. However in June 1854 Howitt could announce that 'the water of the Yarra, saturated with the filth of the town, is to cease to poison the people. Pure and excellent water from the River Plenty is being brought 25 miles, a gigantic reservoir being formed there for securing a regular supply'. Construction of the Yan Yean, which was to have a capacity of 6,500 million gallons, or 30 gallons/person/day, was commenced in December 1853, and first supplied Melbourne four years later.

Intemperance was another problem in this period. Dr. Singleton decried the 'drunkenness which abounded to an alarming extent, and the quantities of liquor consumed . . . vastly exceeded that of any country in which a statistical return
had been taken, in comparison with the population... and no class of colonists seemed to be free'. There was a constant influx of migrants en route for the gold-fields, most of them young men not long arrived in the colony; many of these, because of the heat of the climate, and strong drink, were sent to a lunatic asylum, died from fever, dysentery, or delirium tremens, directly traceable to excessive drinking. Well over half the cases at the asylum during the first few years after the discovery of gold were a result of intoxication. Singleton shows that, in 1855, 75 per cent deaths of Victorian criminals, 60 per cent deaths of lunatics, 35 per cent deaths of adult males, and 33 per cent coroners' cases were the result of chronic alcoholism.

Deaths from 'external causes' may be closely linked with the pioneering environment; they numbered 714 in 1856, and 880 in 1857. In 1853 there were inquests into 147 drownings, 17 falls of earth, 16 shooting accidents, 15 dray accidents, and 14 people died from burns, and 14 from suffocation.

Although there were a large number of drownings, there is an almost complete absence of comment on methods of artificial respiration, in the *Australian Medical Journal* 1855-62.

Singleton lists the three main causes of death, that could be dealt with, as: First, impure water in casks, containing impurities causing dysentery; secondly, want of cleanliness in back premises of crowded parts of the city, and utter neglect of drainage, producing fevers; thirdly, the greatest cause was seen as the neglect of ventilation in buildings, e.g. houses of five, six or more apartments with one fireplace, no ventilators in ceilings or walls, and no provision of any kind for fresh air.

A Dr. Beddoe wrote in 1860 that 'the death rate of Victoria, which appears to have been gradually diminishing with the advance of the colony, amounted in 1856-7 to 1.6720 per cent, comparing favourably with the English rate, 2.1987 per cent. So favourable a comparison must however be qualified by the consideration of the youthful character of the population, without the normal proportion of elderly people, although this was often offset by the number who died from violence, intemperance and resulting diseases of the brain.

Beddoe summed up the medical geography of the colony as (1) excess of violent deaths; (2) excess of deaths from diseases of the bowels (alvine flux) and liver; (3) excess of diseases of the heart; (4) excess of some affections of the nervous system; (5) small proportion of deaths from tubercular and pulmonary diseases and croup; (6) small proportion of deaths from exanthemata, and whooping cough; (7) absence of malarial fever; (8) gradual decrease of mortality from dysentery, typhus, and measles.

In parallel with Beddoe's observation, Victorian infant mortality was less than U.K., and of a different structure. Pox was unknown, scarlatina, measles and pneumonia less than in England; dysentery and diarrhoea and convulsions were little known in England, yet 'such deadly successful weapons in the hands of
death in Victoria as to demand all the wisdom of the wisest, and best skills of
the skilful, in hygiene and medicine. 9

The first attempt to provide hospital accommodation was inadequate in the
extreme—a two-roomed hut which served as post-office, police station and
hospital! The Melbourne Hospital was opened on the present site of St. Paul's
Cathedral in 1848, with room for 21 in-patients, with Melbourne's population at
12,000. With the population increasing to 140,000 the number of beds was
increased to 300 by 1861, and the annual cost of a bed, from £35 to £150. By
1861 there were 18 hospitals, principally for treating the indigent, and three
combined hospital-asylums, all receiving state aid.

As regards the number of doctors, the main source of information is the list
of those men who submitted their testimonials of qualification to the Medical
Board of Victoria. In February 1857, 456 men presented their testimonials, and
in 1859, 592; with the 1859 population at 530,000, the number of doctors would
average 1-114/1000 population. 10 For the 40,000 people in the Ballarat district
in 1856, there were 33 practising doctors. 11

Until Separation, Victorian health administration was in the hands of the
Colonial Surgeon, with assistants appointed during the gold rush years. The
C.S. was responsible for medical supervision of gaols, hospitals, inspection of
vessels, and combating infectious diseases. The first Public Health Authority was
established in 1854 by the surgeon Eccles. ‘An Act for Promoting Public Health
in Populous Places’, 1854, was mainly concerned with giving the responsibility
for providing healthy environments to local authorities. 12 Municipal councils
were required to form a Local Board of Health, to act under the supervision and
direction of a Central Board in Melbourne. Local Boards had to ensure all drains
were covered, all houses had provision for sanitation, pigsties were apart from
dwellings, filthy houses were cleaned and whitewashed, refuse of butchers' shops
removed at the occupants' expense, unwholesome food seized, and noxious trades
regulated.

The Lunacy Department had been formed in 1843. The Yarra Bend Asylum
(1848) accommodated 33 men and 30 women. Inadequate in the rush years, a new
building (1856) raised the capacity to 115, with tent quarters for 180 more. The
Kew Asylum was commenced in 1857. 13

The proportion of lunatics to population, 11-47, was very small compared
with England, but population increased 5·1 per cent in 1859, while the number
of mental cases increased by 16·6 per cent. The main causes seem to have been
intemperance and accidents.

With these slow improvements, the gradual provision of more adequate
services, the medical profession's recognition of the need for clean living con-
ditions, there was a parallel slow decrease in mortality, and the percentage of
patients cured or relieved mounted steadily. The amazing fact remains that there
was no great increase in disease, and no large-scale epidemic in the 1850's, despite
the temporary nature of many living quarters and lack of rudimentary sanitation.
This state of affairs would thus seem to be due in part to the equable climate,
and the improvements, medical and sanitary, that have been alluded to.

NOTES
2. K. Inglis, Hospital & Community, p. 18.
3. Argus, 1/1/1858.
5. Dr. J. Singleton, Incidents in the life of a Physician, 1891, p. 103.
8. Argus, 14/1/1859.