A French naval surgeon's account of disease, treatments and hospitals in colonial Sydney, 1873

Early Australian environmental, social and public health conditions observed by a French "man of science"

In 1873, the French warship *Atalante* visited Sydney for repairs. The vessel's surgeon, Dr F Bourse, had time to observe environmental, social and public health conditions in Sydney and to visit its hospitals. In the National Library of Australia, among an obscure and disparate collection of 19th century medical documents bound into a single volume, one of us (SB) chanced upon an original reprint of Bourse's account of his stay, published in French in 1876 in the *Archives de médecine navale*.[1] We have translated this account, which forms the primary source for this article. It reveals an observer clearly impressed to find a thriving metropolis, with health care in some institutions comparable to that in Europe, notwithstanding what he regarded as an obvious undersupply of hospital services.

The *Atalante* left the French port of L'Orient in August 1872 on a voyage encompassing Brazil, the French colonies of Tahiti and New Caledonia, Australasia, Peru and the United States.[2] When the vessel visited Sydney between 5 July and 17 September 1873, it underwent extensive dry dock repairs on Cockatoo Island. Several photographs of the ship lying at anchor in Port Jackson and undergoing repairs in the Fitzroy Dock at Cockatoo Island have survived in the collection of the Mitchell Library.[3] France and the British Empire had friendly relations at the time, and the officers and crew of the *Atalante* received a warm welcome.[2,4]

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Bourse was able to visit Sydney's hospitals and meet with local doctors and nurses. This occurred in the context of tremendous advances in Western medical practice through the 19th century, when for the first time the scientific method was being applied systematically, largely in hospitals that were valued as ideal institutions of medical research and teaching. This more scientific medical approach had a strong focus on the role of microorganisms in the causation and spread of diseases — initiated in large part by the work of Louis Pasteur in France.

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French warship Atalante, *Fitzroy Dock, Sydney, 1873*

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doi: 10.5694/mja14.00721

Diseases and treatments

Bourse carefully commented on a range of diseases and conditions among the population of Sydney, noting lower morbidity for most conditions than in England. He also cited statistics demonstrating a lower mortality rate for Sydney than England. While asserting that he did not know of a healthier climate than that of New South Wales, he nevertheless attributed respiratory infections to the sudden changes in temperature and humidity that were characteristic of Sydney. He further reported the advice of all Sydney doctors that it was dangerous to venture out in summer without a parasol.

According to local doctors, stress factors played a major role in the aetiology of cardiovascular diseases, which Bourse regarded as "excessively common" in Sydney. These factors included fatigue and "poignant moral emotions" brought on by such things as "gold fever", changes in fortunes associated with "disastrous speculation", huge gambling losses or even "a fortune too quickly gained". A nervous state, or *nervosisme*, particularly in women, also contributed to these diseases. Bourse was convinced that two further factors were significant. The first was alcohol, which he regarded as the curse of the colony; high wages enabled workers to satisfy their passion for *le gin et le whisky*. The second factor is what he termed "the Anglo-Saxon predisposition for violent exercises",

including gymnastics, horse riding and, puzzlingly, *le crickett*.

Citing the statistic that one in 410 individuals in Australia was insane, Bourse attributed the causes (as with cardiovascular diseases) to moral crises, alcoholism, sudden reversals of fortune and gold fever. He recounted the view of the director of the Gladesville Hospital for the Insane that the most frequent cases of insanity occurred among individuals from the Australian interior who were involved in droving livestock and became melancholic. Most cases among women also involved melancholia, but some were due to religious mania.

Bourse reported that smallpox vaccination in Australia was not compulsory but was obtainable without charge at "vaccine institutes" and that almost all the population had been vaccinated. Given subsequent outbreaks of the disease in NSW, this claim of universal vaccination is unlikely to have been accurate. The director of the Sydney vaccination institute provided vials of vaccine for the use of the *Atalante*'s crew.

The doctor discussed the local flora at length, in particular eucalyptus, noting its medical applications for treating bronchitis and diarrhoea, but also reporting that its use was marginal in regular medical practice and was barely mentioned in Australia. These claims must be measured against the production of eucalyptus oil by pharmacists in Australia at the time of his visit. Indeed, one of those products, Bosisto's Parrot Brand, continues to be sold today.

Bourse reported that "serpents are excessively numerous" in Australia. He devoted a lengthy discussion to the "only reliable treatment" of snakebite, recommended by Dr Günther, an assistant keeper at the British Museum, and Mr Krefft, curator of the Australian Museum in Sydney and author of *The snakes of Australia*.[5] This treatment involved applying a ligature close to the bite, making an incision, squeezing the wound and washing it with urine. The patient had to be kept moving, was not to lose courage, and it was "essential" not to despair. Fear was a major cause of death. Ammonia and an alcoholic stimulant were to be administered internally. Bourse added his own view that cauterisation with a red-hot iron or with a caustic agent (which should always be carried when in the bush) should be part of the treatment.

Sydney's hospitals

Bourse's account of *le régime hospitalier* in Sydney was prefaced with the observation that it appeared inferior to what would be expected of such a large city. He seems to have reached this conclusion based on an examination of the ratio of hospitals to people. By his reckoning, a population of 458 667 in greater Sydney was served by general hospitals with a capacity of just 410 beds.

St Vincent's Hospital, operated by the Sisters of Charity, was described as competent but small. It had capacity for 60 patients and a staff of two surgeons and two physicians, with nursing and pharmacy services provided by the nuns. Two of his ship's crew were admitted for treatment, and Bourse noted that the maximum daily charge for inpatient care was six shillings. According to the hospital's 1874 annual report, charges were negotiable: those with means could be charged up to two guineas on admission and two guineas weekly for the first 3 weeks, thereafter 14 shillings per week. There were provisions to admit less wealthy patients on terms appropriate to their means.[6] Shortly before Bourse's visit, the hospital had relocated to its current site in Darlinghurst, adjoining *un vaste parc*, allowing those convalescing to go for walks. He noted that some of the nuns who had founded the hospital had trained in France.

Bourse reported that the Sydney Infirmary (later renamed the Sydney Hospital) dated from the founding of the colony and had 350 beds in well aired wards of 30 to 40 beds each. There was also a maternity annexe with 20 rooms. He considered that the hospital had a high level of cleanliness, good equipment, fine surgeons and exceptionally favourable surgical outcomes. The hospital's surgeons affirmed that they had no cases of tetanus or "purulent infection". These favourable surgical outcomes, according to Bourse, were due not only to the medical care but also to the fact that all patients with serious wounds were isolated most of the time in canvas and wooden tents, constructed according to the latest designs. The medical staff of four surgeons and an equal number of physicians was supplemented by honorary appointees. The hospital's nursing service, he observed, was "entrusted to ladies after the system established by Miss Nightingale". The hospital was funded by a combination of private donations and government subsidies. Bourse cited sobering mortality statistics: in 1872, there were 1840 admissions and 232 deaths.

Despite his overall favourable verdict on the quality of care, he concluded that the hospital was totally inadequate for the needs of the population and recorded that a decision had been made to build a new 500-bed hospital, to be named after Prince Alfred. The new hospital was completed in 1882, funded by public subscription, in thanksgiving for the deliverance of the Prince from an assassination attempt during his state visit to Sydney in 1868.

Bourse's interest in medical matters included mental health, and he travelled to Gladesville to visit the Hospital for the Insane (as the Tarban Creek Lunatic Asylum had then recently been renamed). There he was shown around by Dr Frederic Norton Manning, appointed as superintendent in 1868. He recounted that Manning had been sent, at government expense, to study different modes of treatment of the insane in France, England and America. Bourse noted

approvingly that treatment regimens at Gladesville had been borrowed from the Charenton, Saint Anne and Ville-Evrard asylums in France. Bourse observed that violence was never used at Gladesville, nor was the *camisole de force* (straitjacket) employed. Instead, inmates were free to receive training and instruction, engage in manual work and enjoy recreational pursuits. Religion was regarded as beneficial to treatment. Music and theatrical performance were also important parts of therapy, and each month there was a concert of some kind. The spacious grounds of the hospital provided walking areas for the patients, although the sexes were segregated.

Bourse was effusive in his praise of Gladesville Hospital, which he described as spacious, airy and having an agreeable location, making it "admirably appropriate to its purpose" despite its distance from Sydney town. Wards of between 15 and 20 beds facilitated surveillance, while individual rooms were reserved for the violently insane. At the time of his visit, there were 557 patients, with about equal numbers of men and women.

While concluding that hospital facilities in Sydney were inadequate for the population of such a large city, Bourse was relatively favourable in his assessment of the quality of care provided. This was in stark contrast to his scathing verdict of what he subsequently found in New Zealand. In Auckland, the 20-bed "hospital" was little more than wooden barracks intended solely for the indigent. His greatest praise was reserved for the health institutions of San Francisco, which he conceded, according to many reports, were superior to the great hospitals of France.

Concluding observations

While some of Dr Bourse's beliefs about the aetiology of certain diseases would today be regarded as bizarre, his observations provide insights into the concerns of the time regarding diseases, the provision of hospital care and how it was financed. They also show that the early health institutions in Sydney were in tune with developments in other parts of the world and benefited from the international mobility of the hospital workforce.

Acknowledgements: We thank the anonymous reviewer for suggestions to improve this article, and Christine Edwards for advice on some of the pharmaceutical substances to which we refer.

Competing interests: No relevant disclosures.

Provenance: Not commissioned; externally peer reviewed. ■

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6 St Vincent's Hospital annual report 1874. Sydney: St Vincent's Hospital, 1874: 4. ■