



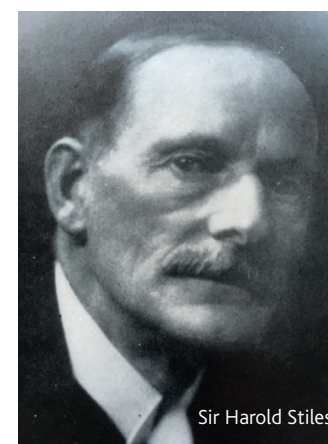
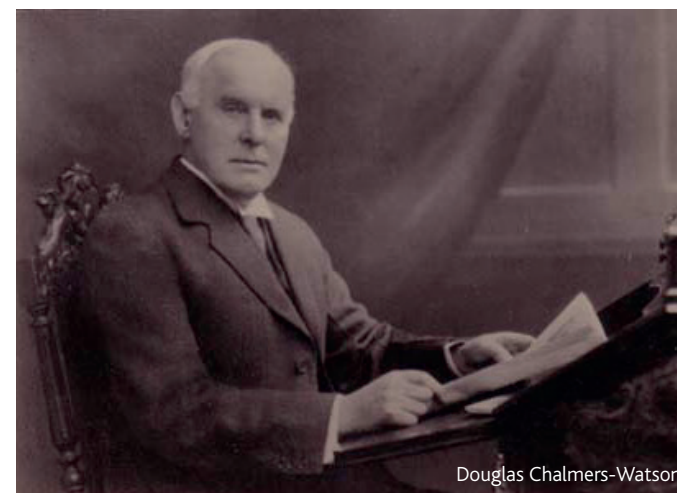
Tuberculosis (TB) was a dreaded disease in Britain. No family escaped its clutches, and it carried a huge stigma. Surprisingly perhaps, East Lothian played critical roles in understanding TB and achieving the cure, writes Chris Holme.

In 1882 Robert Koch identified the organism which causes tuberculosis. But he got one thing wrong – he declared humans could not contract the bovine form of the disease. In later years, two Gullane surgical knights, Sir Harold Stiles and his pupil Sir John Fraser were neighbours in Hill Road. Stiles was head surgeon at the Royal Hospital for Sick Children (Sick Kids) in Edinburgh. Around one in five patients in the Sick Kids had TB, mainly in the bones and joints. Styles operated on them and kept samples. Then, in 1913, Fraser examined them in a detailed study and found the bovine form of the disease was the principal source – caused by children drinking infected milk.

Gullane was home to the Sick Kids convalescent home at Muirfield, which opened in 1909. It had a capacity for twenty-four children – and these would have included non-infectious kids recovering from TB. A strong bond developed with the other Muirfield, the golf club next door where programme sales for successive Opens generated considerable funds for the home. Later, there was another convalescent home at Stiles' former home, Whatton Lodge. Its sale caused a bit of a stushie just before

the creation of the NHS in 1948 and was settled only after the intervention of the Secretary of State for Scotland. It was for mineworkers for whom respiratory diseases like TB, pneumoconiosis and emphysema were all too common. Some Hill Road residents objected to such a grand house being used by miners. However, Sir John's widow Lady Fraser and her son said they had no objection *"as they feel certain that had Sir John been alive, he would have been the last person to stand in the way of such a project."*

The other drive in TB research was by two celebrated Edinburgh physicians who suddenly became farmers. Douglas and Mona Chalmers Watson were a remarkable couple. Mona was the first woman to graduate in medicine from Edinburgh University. Unusually for that time, both had very active medical careers and wider interests including support for women's suffrage. Everything changed in 1923 when Douglas inherited the farm at Fenton Barns. Both he and Mona knew of the ravages of TB on children. They established a model dairy to produce certified TB-free milk. The farm became renowned for its innovation and experiments to improve the quality and safety of milk and they sold this widely.

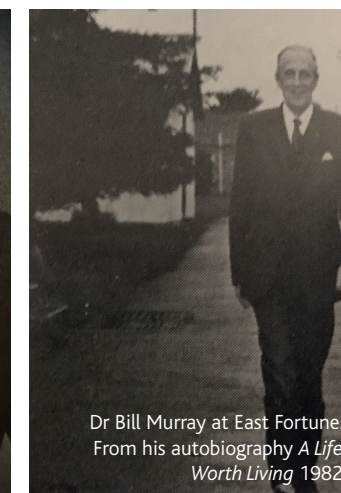


So, what happened in the wake of all this work in East Lothian? Precious little. Britain was painfully slow compared to other countries in taking concerted action that was needed – the slaughter of infected cattle, pasteurisation of milk and at least trialling the BCG vaccine against TB developed in 1921. The result was that children in Britain continued to die needlessly – at least 25,000 in the inter-war years, and many more were left crippled for the rest of their lives.

Like Fenton Barns, East Fortune also made use of old military buildings. It was established as a tuberculosis sanatorium in 1922 to meet the needs of adults from seven local authorities in the Lothians and Borders. It offered the standard treatments – prolonged bed rest, fresh air, and chest surgery for some.

After World War II, TB was still killing someone every two hours in Scotland. Young people aged 18 to 24 were at particular risk. Half of those diagnosed would be dead within five years. Public concern and media coverage contrasted increasing waiting lists here with empty beds available at reduced rates in Switzerland. So, the NHS paid for treatment in Swiss sanatoria at Davos and Leysin. The first flights to Zurich began in June 1951. Bill Murray, medical superintendent at East Fortune, was given the task to organise all patients from the east of Scotland. By the time it ended in 1956, more than one thousand Scottish patients had been treated.

Great hope had also been placed in a new drug – streptomycin, discovered in 1944. It worked for some but not for others. Jimmy Williamson was another doctor recruited to East Fortune in 1951. One of his patients was the future rugby commentator Bill McLaren. Streptomycin worked for Bill but not for three fellow East Fortune patients who later died. Bill recalled: *"I came closer to despair that time than at any other stage of my career... the*



saddest thing was constantly seeing your fellow patients, especially those you had got friendly with and chatted to every day, suddenly decline and then die."

Treatment in Edinburgh was desperately chaotic. Hospital and outpatient services had been kept apart – partly to maintain the fiefdoms of two senior doctors who loathed each other. One of them also hated his young women patients who seemed to develop a red-cheeked pallor as the disease took hold. He delighted in telling them on ward rounds: *"You are all rosy, red apples – rotten to the core."* He also told one woman in the Royal Victoria Hospital that she would be transferred to the City Hospital because it had a mortuary, and the Victoria didn't.

All this changed with the arrival of John Crofton in 1952. He had worked on the streptomycin trial in London and knew about drug resistance. East Fortune provided critical support by freeing up 150 beds for patients from Edinburgh. In addition, Crofton brought in his own team of consultants – Jimmy Williamson from East Fortune was the last to be recruited in 1954. Crofton's group developed a revolutionary cure using all three available drugs from the outset and scrupulously monitoring each patient's progress. In 1958 the Edinburgh TB mass x-ray campaign identified hidden infection in the community. The Edinburgh method became the gold standard of TB treatment in affluent countries. The International Union made great efforts against tuberculosis and the Medical Research Council to develop treatments in poorer countries.

Despite this, TB remains a major killer. In 2020 it killed around 1.3 million people – not far behind COVID, which killed about 1.8 million people. Neither bug recognises any frontier, and both are largely spread by airborne infection.

Jimmy Williamson always looked fondly on his time in East Lothian. He later recalled his last TB patient: *"He was a nice chap who had a shadow on his lung. I told him it was tuberculosis – and he grabbed my hand and said, 'Thank God!' If I had said that to him ten years earlier, he would have wept. The difference was that he knew he would now be cured – and he was."*

This article formed the basis of a talk by Chris Holme to the Gullane and Dirleton History Society.

List of primary sources and films: www.historycompany.co.uk/2021/10/21/history-company-newsletter-3/