

Paul Robertson recalls a London curate's pioneering work



GERM THEORY & CHOLERA

key points

In 19th century Britain, cholera was a deadly foe and it seemed nothing could be done for its victims.

Germ scepticism was for a long time a dominant voice.

Careful observation by Henry Whitehead, a London curate, helped find how cholera was spread.

The boy's diarrhoea had started. So far it was infrequent, but his parents didn't expect him to survive. His baby sister hadn't. The family had been praying, the local curate had visited, but Broad Street was gripped by cholera and everyone knew there was nothing else to be done.

The impact of cholera in 19th century Britain is almost impossible for us to grasp fully. In 1831 it appeared suddenly, ravaging coastal towns in England. Cholera killed 14,000 people in London in 1849 alone. But as the 19th century drew to an end, so did the threat of cholera. History remembers one man as the vanquisher of cholera in London, Dr John Snow, an anaesthetist to Queen Victoria, and pioneer of the germ theory of disease. However, there is more to the story than that.

Controversy

The Earl of Shaftesbury, a commissioner in the newly formed Central Health Board in London,

had for some years failed to persuade the authorities that improving housing conditions and sanitation might have a role in controlling cholera epidemics. The reason for his failure was heated controversy over the cause of cholera. In 1853 *The Lancet* opined: 'What is cholera?... all is darkness and confusion, vague theory and speculation.'¹ Cholera was attributed by the best medical minds of the day to miasma, an invisible mist-like, disease-spreading presence. However, doctors such as Snow were beginning to suggest that microscopic 'germs' passed from person to person were responsible.

Snow had noted that the closer together people lived, the more likely they were to contract cholera, particularly if they shared a single water source. However, housing or sewerage reform would be expensive and disruptive – and futile if the germ theory of cholera was wrong. Snow lacked sufficient evidence to convince the powers that be, until he found an unexpected ally in a local curate.

The Rev Henry Whitehead was the curate of St Luke's Parish Church in Soho, a particularly impoverished area in London at that time. In August 1854 his parishioners bore the brunt of London's worst cholera outbreak; around 700 lost their lives. Centred on Broad Street,² the outbreak famously led to one of the earliest demonstrations of the waterborne spread of disease. Snow lived in nearby Piccadilly and was able to observe events closely. He had argued that cholera was spread through water and convinced a reluctant council to remove the handle from the local water pump.³

Evidence

From the outset, Whitehead was sceptical of germ theory, not least because he had used pump water to dilute his brandy with no ill effect. He hoped to disprove Snow's hypothesis. Over the next months, after the outbreak had abated, he meticulously conducted detailed interviews with everyone who had lived in the parish at the time of the outbreak. He demonstrated that 58% of people who had drunk pump water developed cholera, compared with only 7% of those who had not. Further circumstantial evidence came to light. Two fatal cases in Hampstead were linked to water bottled from the Broad Street pump. The local brewery, which had its own well, saw no cases. Whitehead realised that Snow had been correct. Sadly, Snow died in 1858 before he could see his ideas become widely accepted. Whitehead continued to work in London, tackling further cholera outbreaks, before moving to a quieter country parish in later life.

Whitehead's involvement in controlling cholera in London epitomised the changing focus of evangelicalism during the nineteenth century. An increasing importance was attached to living out an 'incarnational' faith – a faith prepared to get its sleeves rolled up and its hands dirty in practical demonstrations of the gospel among the needy, rather than merely preaching it from a distance.⁴ 'He [Whitehead] was the only gentleman, indeed the only person above the rank of a day labourer, in the parish... and he lived in a parsonage built on the site of the ancient parish rubbish heap.'⁵ He rejected the prevailing 'laissez-faire' approach to poverty. According to this view, common among some evangelicals at the time, cholera was simply one of the many consequences of poverty. Poverty, in turn, was seen as a moral disease, the result of laziness, uncleanliness and ungodliness. Undoing the consequences of poverty was to remove the 'God-ordained' checks and balances necessary for motivating people out of their poverty. Against this attitude Whitehead wrote: 'The more one studies human nature... the more one is able to perceive that no one, not even a street beggar, is deemed to be out of the pale of sympathy.'

Solutions

He had rightly perceived that, as the causes of poverty are complex, so must be the solutions.

Practical assistance must go alongside calls to reform morals; food, clean water and adequate housing must accompany Bible study and prayer meetings. And he believed that the Church should be at the forefront of working towards those solutions. This approach is wholly consistent with the nuanced view of poverty, and the manner in which God's people should respond to it, presented in the Bible. Some verses might be taken to support a right-wing, capitalist approach where the poor are responsible for their state. 'Lazy hands make for poverty, but diligent hands bring wealth' (Proverbs 10:4). Others sit more comfortably with a more left-wing, socialist approach where the poor are victims of unjust systems. 'Your rulers are rebels, partners with thieves; they all love bribes and chase after gifts. They do not defend the cause of the fatherless; the widow's case does not come before them' (Isaiah 1:23). A faithful following of the Bible neither endorses a view that the poor are wholly responsible for their poverty, nor are they purely victims. Instead both aspects are held in a realistic tension.

Henry Whitehead was willing to work with secular institutions for the common good of the community he lived and worked in. His authentic and practical demonstration of love for the people in his community meant that he was respected beyond church circles, even though his work unwaveringly reflected his Christian beliefs and values. He was able to see his medical work as an expression of his faith and an extension of his ministry, rather than being something separate. If an ordained minister can value medical work and integrate it to his faith, can we not do likewise?

Bridge

Undoubtedly British culture has moved on. The nineteenth century Church bore greater responsibility for public health and social care; wider society was more sympathetic toward Christianity, and Whitehead's scientific interest and ability was greater than most ministers today. Nevertheless, Whitehead, through living out the Gospel incarnationally, put flesh on his Christian faith and helped bridge the widening divide between the church and medicine as he worked for the common good of the city he lived in.

A simple curate's work was influential in establishing the germ theory of disease that led to improvements in the quality of housing in cities across the UK, substantially improving the lives of many of the poorest in Britain. This is work that is part of God's mission to restore a fallen creation. How might we and our churches do likewise in our times?

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- Keller T. *Generous Justice* (2010) London, Hodders
- Newsom SWB. Pioneers in infection control: John Snow, Henry Whitehead, the Broad Street pump and the beginning of epidemiology. *Journal of Hospital Infection*. 64; 3:210-216
- Rawnsley HD, Henry Whitehead: 1825-1896: a Memorial Sketch, Glasgow: James Maclehose and Sons. 1898.

Whitehead perceived the causes of poverty are complex; so must be the solutions

references

1. Editorial. *The Lancet* 1852; 1:393
2. Broad Street no longer appears on London maps. In the 1930s it was renamed Broadwick Street.
3. The removal of the handle did not, in fact, stop the initial outbreak - the initial wave was already waning by this time. It did, however, prevent a second wave, likely saving many lives. The handle wasn't replaced until September 1855. (Chave: 1958; 103-4)
4. Whitehead was also a gifted preacher and valued the importance of good preaching.
5. Rawnsley; 1898, 80