

Notes on the Kildwick Typhoid Epidemic – 5

How the authorities responded

(December 24th 1898 – February 1st 1899)

Initial investigations

It may be surprising that although the medical officer, Dr. Atkinson, was informed of the case of typhoid at Kildwick Hall on 24th December 1898, no attempt was made to alert the community in the village below as they celebrated Christmas and the New Year. But this can be accounted for by the fact that while the case at the Hall was an isolated one, there was no obvious cause for concern.

Even on the same day that the two further cases in the Tillotson/Baldwin household and the one at the White Lion were reported (January 16th), Dr. Scatterty wrote to Dr. Atkinson assuring him that¹:

... in view of the other typhoid fever cases in the village every precaution had been taken at the Hall, so that there could be no suspicion of the cases in the village being the result of infection from the Hall.

On hearing of the three new cases, Dr. Atkinson visited Kildwick for the first time since the report of typhoid at the Hall on December 24th. During this visit he found that²:

The sanitary conditions of the two houses (which had produced four cases) was right, and the only thing in common was the water supply. There were no complaints as to its quality; on the contrary, it was pronounced good and constant, and had been in use 20 years. On analysis, it appeared perfectly clear, and there was no sediment or anything to indicate pollution.

He then examined the village water tank and the drainage from Kildwick Hall in the company of the council surveyor¹:

The only thing there was in common, as accounting for the outbreak, was the water supply. The supply was piped to the houses from a tank. He visited Kildwick Hall and looked into the drainage. He found that there was no tank for provided for the reception of the drainage, which ran in a stone drain down the same field in which was situated the water supply tank. The outlet was the canal. The water supply tank was situated to the right of the stone drain, and about 14 feet away.

Later, Dr. Atkinson would report²:

They traced the drain down the Park field and found that it emptied into the canal. The effluent here was perfectly clear, and showed no indication of any sewage contamination. The position of the water tank was to the right of the drain from Kildwick Hall, and there was no apparent possibility of contamination.

At this time, Dr. Atkinson instructed the local households that all drinking water should be boiled before use⁴. However, it took a further four days and two new cases (from two further households) before Dr. Atkinson ordered the supply to the village be cut off (January 20th) and arrangements made for water to be supplied, via a stand-pipe, from Farnhill.

At this point there were six cases in four different households, but even then Dr. Atkinson was not totally convinced that the problem was with the water supply²:

On the same day [January 20th] he analysed a sample of water taken from a tap in a fever-stricken house. It was perfectly clear to look at, and had no sediment or haziness about it. It yielded no evidence of contamination from sewage or other organic impurity.

The newspaper report does not say what form Dr. Atkinson's analysis took, but it is certainly the case that just examining water with the naked eye, or even with a low-magnification microscope such as might be available to a medical officer of the time, would not be sufficient to identify contamination with *S. typhi*.

The facts, as known at the time, were reported to Skipton Rural District Council at their regular meeting on January 21st. Dr. Atkinson said¹:

... there was nothing absolutely positive, but the probability was that the water supply had been contaminated ... He had made an analysis of the Kildwick water, and had been unable to find any trace of contamination by sewage. He believed, however, that the water supply was the origin of the outbreak.

Significantly, however, he did not say where he thought the contamination originated. Later, however, he would suggest that the problem arose from effluent escaping from the Kildwick Hall drain and²:

... that owing to the ground being so thoroughly saturated, the sewage had percolated through, and come in contact with the water supply.

The RDC meeting ended with the council referring the matter to the surveyor, with instructions to investigate and report.

The next day, the council surveyor Mr. Rodwell, put the issue beyond doubt by the simple expedient of pouring a quantity of strong dye down a WC in Kildwick Hall and watching for it to appear in the village supply tank and the public water-trough, situated adjacent to Kildwick school.



Figure 1: Water trough adjacent to Kildwick school

It took less than 15 minutes for the dye to appear – far faster than would be required for water to percolate through the ground.

Mr. Rodwell was very clear in his conclusion. In a letter written on January 22nd 1899, he explained to Mr. Broughton, the manager of the Kildwick Hall estate and agent for the owner Major Wilson³:

We made several openings into the Drain & followed up the Springs which supply the Water Tank & we proved without a doubt that the Drainage of Kildwick Hall is connected direct to the Water Supply.

There was a direct connection: the Kildwick village water supply was, in fact, a sewer fed by waste water from Kildwick Hall.

The supply was immediately disconnected and, on January 23rd 1899, Dr. Atkinson ordered the immediate closure of Kildwick School – as reported in the school log book, shown below.⁷

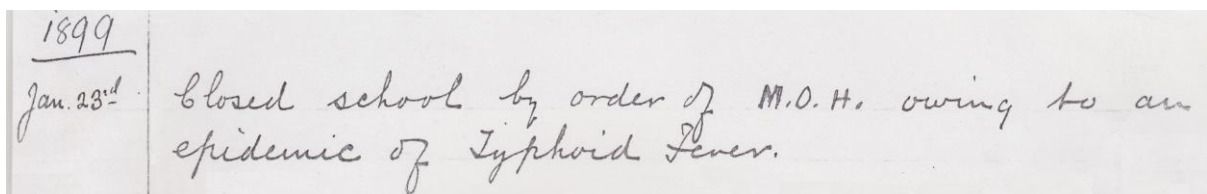


Figure 2: Entry in the school log book

By then there were 15 confirmed cases and 2 dead.

Special meeting of Skipton Rural District Council (February 1st 1899)

Once the source of the infection had been identified and shut-off, and a new source of water provided, the authorities seemed to think there was no more for them to do but wait for the outbreak to subside.

Note: The rather convoluted story of how the village was supplied with water through the months of the epidemic, and the even longer period it took to provide a fresh, clean, permanent supply, will be the subject of a separate Note.

Unfortunately things very quickly got worse and, on Wednesday February 1st, a special meeting of Skipton Rural District Council was convened to discuss the situation which, by then, numbered 24 confirmed cases with 4 dead.

This meeting was reported, in full detail, by the Keighley News and the Craven Herald^{2,4}, and the text that follows is taken from both of these reports.

The meeting began with the Chairman expressing the sympathy of the council with the relatives of the dead and saying:

They would do everything in their power to help those who were suffering from the disease and to prevent its further spread.

But then, immediately after this, one of the council members, Col. Maude, suggested that restrictions should be placed on the reporting of the meeting by the press. This was overruled.

There was then a short discussion about whether to allow the proceedings to be watched by Mr. Peacock, a solicitor from Bradford, on behalf of Mr. Barritt, the head of one of the bereaved families. This was readily agreed:

[The Clerk said] Personally he was satisfied that the council, at any rate, had been guilty of no negligence.

Councillor Smith thought it would be more satisfactory to the public if Mr. Peacock were allowed to be present.

The Clerk said if the council was in any way liable they had no intention of evading their responsibility.

Councillor A. Fletcher did not think the question should be discussed in the dark, or anything kept back. The outbreak needed the strictest investigation, and as a council they had nothing to fear from publicity.

Dr. Atkinson then provided an extensive breakdown of the progress of the epidemic and his actions since his visit to Kildwick on January 16th (as described earlier in this Note). During this, he voiced his opinion about the percolation of contaminated water from the Kildwick Hall drain into the village water supply. However, he subsequently also said:

... tests were made, which fully demonstrated that sewage from Kildwick Hall had actually passed through the water tank.

He then answered questions from the Chairman, including:

The Chairman: *When did you have the first intimation that there was typhoid fever at Kildwick Hall ?*

The Medical Officer *replied on Christmas Eve when he received a letter from Dr. Scatterty. ... There was therefore (the letter added) no suspicion of anything wrong with the sanitary condition of the Hall, and no need for any special inspection. Dr. Scatterty also stated that the stools were being thoroughly disinfected, and all precautions taken.*

The Chairman: *Did Dr. Scatterty say how the stools were disinfected ?*

The Medical Officer: *No, but I have since learnt that they were treated with carbolic acid for half-an-hour, and then emptied into the drain. Cremation or disinfection with perchloride of mercury is generally adopted.*

The Chairman: *When Dr. Scatterty told you that he was taking the usual precautions, I suppose that you considered that he was doing so ?*

The Medical Officer: *Yes.*

The Chairman: *And I suppose under the circumstances, you thought that he would have the same kind of knowledge with regard to typhoid fever as yourself and that he would either bury or burn the refuse ?*

The Medical Officer: *Certainly.*

The Chairman: *You did not think it was going into the drains ?*

The Medical Officer: *I did not.*

The Chairman: *When Dr. Scatterty found that it was a case of typhoid fever from which Mr. Brigg was suffering, had you any reason for believing that he would take precautions other than putting the stools in the drain ?*

The Medical Officer: *Yes, Dr. Scatterty assured me in his letter that he was taking all precautions. I concluded that the matter was perfectly safe in his hands. He is not only a doctor, but a Medical Officer of Health. Dr. Scatterty said the stools had been thoroughly disinfected, and I concluded that would be by burial or burning. I never thought they were going into the drainage.*

The Chairman: *In typhoid fever the danger of infection is from the stools ?*

The Medical Officer: *That is the only source of danger.*

Dr. Atkinson then answered questions from Mr. Peacock, during which he made a rather contradictory statement:

... the Medical Officer ... declined to say that carbolic disinfectants were of no use in the destruction of typhoid germs, pointing out that carbolic was said by some authorities to be fatal to the germs.

Dr. Atkinson was not asked to account for why he was so concerned about the excrement from the Hall being treated with carbolic and then discarded into the drain, if such a treatment was “fatal to the germs”.

It may be significant to note that after the temporary hospital was opened in Kildwick, Dr. Atkinson would go out of his way to report to the RDC that all material was being treated with perchloride of mercury and subsequent burning. He does not, himself, appear to have sanctioned the use of carbolic⁵.

Mr. Peacock ended by trying to ask a rather pertinent question which Dr. Atkinson was prevented from answering by the Chairman:

Mr. Peacock: *Can you explain why you made no visit to Kildwick between the 24th of December and the 16th of January ?*

The Chairman: *I don't think that is a question that is necessary. I think the letter from Dr. Scatterty was sufficient for Dr. Atkinson, Dr. Scatterty being the Medical Officer of Health for Keighley. He wrote to Dr. Atkinson that everything was being done.*

Mr. Peacock then said:

... the calamity that had fallen upon Kildwick, and especially upon the family of Mr. Barritt, his client, was deserving of the fullest investigation, with every evidence that was procurable that could be throw light upon it. [he was] desired by his client, Mr. Barritt, and other residents of Kildwick, to say that they wished the fullest investigation to be made of this epidemic and that he would ask on behalf of Mr. Barritt that the board should direct a local inquiry into the whole of the circumstances of the case.

Col. Maude took up the matter:

Col. Maude: *Does Mr. Barritt think there will be any advantage in a local inquiry, over an inquiry where we have all our officers ?*

Mr. Peacock: *You see, there are persons implicated in this issue whose interests are affected by what has gone before the council today and who might be able to give information and material assistance.*

The request for a wider inquiry was rejected.

The council did not consider an inquiry, such as had been suggested, necessary. They had every information before them, and everything that was possible was being done to alleviate the suffering of the patients and to prevent the spread of the disease.

When asked by the Chairman what was being done, Dr. Atkinson said:

... all the cases that were able to bear removal were removed at once to hospital. The houses had been disinfected and all necessary precautions taken. The water supply had been cut off, and a supply organised from Farnhill. The best nursing assistance had been procured, and everything that was needful had been looked to. All cause of the disease had been destroyed. The outbreak was the result of something that the council knew nothing about.

Referring to the case of Mr. Hill who had fallen ill after the dinner at the White Lion on January 2nd, he said:

He was now ailing, and the symptoms were suspicious ... But when three weeks had elapsed, there was not much fear of the symptoms of typhoid appearing.

The meeting concluded with the council congratulating themselves:

Col. Maude thought the subject had been thoroughly ventilated. He had confidence that Dr. Atkinson had taken every precaution, and there was no doubt about the origin of the disease, and now that it had been dealt with they could only hope that the epidemic would soon subside. The only question was the future water supply of Kildwick. Nothing had been kept back.

Councillor Amcotts Wilson [the brother of Major Wilson, the owner of the Kildwick estate] assured the council that Major Wilson, the owner of Kildwick Hall, was very anxious to do everything that was required of him.

The Chairman said the question of the water supply would have to be gone into at a later stage. At present they could do nothing beyond leaving the matter in the hands of their officers.

The council then adjourned.

The meeting had taken just 1½ hours.

By the end of that day, the death toll had increased to 5. The epidemic was just a fortnight old; it would go on for another two months.

Press reaction

The Craven Herald restricts itself to reporting the facts of the meeting, as described above. The Keighley News, on the other hand, includes in its February 4th issue, an editorial piece on the meeting. After saying that they do not intend to apportion blame, they then go on to point the finger in the obvious direction:

Skipton Rural District Council made, it will be allowed, and honest effort on Wednesday to get to the bottom of the terrible Kildwick business. It is quite conceivable that further steps may be taken to have the matter investigated by some higher, outside, and presumably more impartial, authority: for harassed relatives half maddened with sorrow will hardly leave any stone unturned to arrive at the true sources of mischief. In the view of such possibilities we do not propose to make any detailed observations on the facts disclosed. ...

One is compelled to remark that such decimating visitations almost always appear in villages and thinly populated districts. In other words, no attacks are ever experienced in towns, by which such a large proportion of the population is affected as in villages. Nor is the reason difficult to discover. In thickly populated districts, a clear provision on the part of the sanitary authorities is both possible and necessary. In the country, the water supply is less perfectly protected against the intrusion of foreign matter, and drainage channels are less carefully maintained. Because the danger is apparent less, fewer precautions are taken, and we are occasionally startled by a visitation which carries off an alarming percentage of the population. So far as the material cause of the contamination is concerned, we [... unreadable ...] imagine that the matter is now placed beyond doubt, and that anybody who heard the various statements could put his [finger ?] on the exact seat. That however is a very different thing from saying who is responsible for what has happened ...

Subsequent action by the authorities

Although the situation at Kildwick was the subject of discussions in later, scheduled, meetings of Skipton RDC, the suggestion that they leave the matter in the hands of their officers was, more-or-less, what they did.

Beyond approving the actions of Dr. Atkinson and Mr. Rodwell in connection with the supply of water to the village and the provision of a temporary hospital in Kildwick, the subsequent meetings would largely confine themselves to hearing reports on the progress of the epidemic from Dr. Atkinson and continuing to refuse mounting calls for a fuller inquiry.

One possible reason for any lack of action on the part of the council is that they probably underestimated, quite badly, how long the epidemic would continue.

The source of the infection had been cut-off on January 20th, and Dr. Atkinson had said that there was not much fear of typhoid appearing after three weeks had elapsed. By this calculation, the last case should have presented itself around February 10th – just 9 days after the special council meeting, and a clear week before their next scheduled meeting.

This does, indeed, seem to have been Dr. Atkinson's assumption. At the meeting of the council on February 18th he said⁶:

He had been hoping that the outbreak would finish about the 10th or 11th of February ...

He was wrong.

What next – can you help ?

Do you or your family have any additional information on the Kildwick typhoid epidemic ? If so, the Farnhill and Kildwick Local History Group would like to hear from you. Please email history@farnhill.co.uk

References

- 1 Craven Herald, January 27th 1899
- 2 Craven Herald, February 3rd 1899
- 3 From the Eshton Hall papers held at West Yorkshire Archive Service, Bradford. Ref 68D82/5/454
- 4 Keighley News, February 4th 1899
- 5 Craven Herald, March 24th 1899
- 6 Craven Herald, February 24th 1899
- 7 Extract from the Kildwick School log book, copy in possession of the Farnhill and Kildwick Local History Group