Scottish Hospital Inquiry

Glasgow 4 Part 2
Questionnaire for 'Consequential Witnesses'
Prof Brenda Gibson

The Inquiry has decided to hear the evidence of Professor Hawkey, Dr Agrawal and Dr Drumwright in respect of their report on the evidence of risk of infection from the water and ventilation systems at the QEUH/RHC ("the HAD Report") [Bundle 44, Volume 1, Document 1, Pages 5 to 223]. As a consequence, the Inquiry is seeking further evidence from certain witnesses who previously gave evidence in Glasgow 2 or Glasgow 3.

You have been identified as someone likely to have direct knowledge of key issues arising from that report. To assist in gathering this information effectively, we have provided you with a short questionnaire. This includes questions tailored to your prior involvement, along with access to relevant documents in the Objective Connect space, including Bundle 44, Volume 1 (the report by Professor Hawkey, Dr Agrawal, and Dr Drumwright), and Bundles 6 and 7. We ask that you respond to each question as fully as possible, to help ensure the Inquiry's understanding is accurate and complete.

To answer the questions please type your answer in the answer area marked [Type your answer here] below the question, you will note that your type comes up in a different font from that of the question – this is to allow your answer to be read with ease.

Please do not insert pictures or documents into your written answers. All our hearing bundles are on our website https://www.hospitalsinquiry.scot/. If you would like to refer to a document within our bundles which captures your answer to the question, then please refer to the relevant document in the format (Bundle X, Document Y, Page Z).

If you wish to refer to your own document, then describe the document in your statement, list all such documents at the end of the statement and provide us with a copy of that document in order that we can process the document in accordance with Inquiry protocols.

1. Your professional practice at Yorkhill

Whilst you have already provided a detailed CV in your earlier statement. Please could you summarise your connection to, involvement with or association with the paediatric haemato-oncology service in the Schiehallion Unit at Yorkhill from 2005 to 2015 and the extent of your experience/knowledge/understanding of environmentally relevant bacteraemia at Yorkhill?

I was a Consultant Paediatric Haematologist on the Schiehallion Unit, Yorkhill between 2005 and 2015. I was Head of the Department, Programme Director of the Bone Marrow Transplant Programme from 2011 onwards when the programme was

first JACIE accredited and Director of the Haemophilia Unit for some time.

Paediatric Haematology- Oncology – both malignant and benign - relocated in 1996 from a general paediatric ward to a refurbished Unit in an area which had been vacated by Child and Family Psychiatry. It was named the Schiehallion Unit. I don't remember the source of funding but my aim with this move was three-fold: (1) to provide a safe environment for immunocompromised patients where they were not exposed to children admitted to a general ward with transmissible infections, primarily viral , who posed a risk to them; (2) to provide cubicle accommodation with en-suite facilities for isolation; and (3) to accommodate the entire multidisciplinary team recognising that treating children with a live threatening disease requires a team. The Unit consisted of two adjacent wards – an inpatient and outpatient facility, accommodated medical staff; nursing staff- ward, outreach, research; pharmacy; social work; data management/ administration; a class room and a parent suite of three bedrooms, a sitting room and a kitchen. This is what came to be known as the family of Schiehallion.

Between 2005 and 2015 I was responsible for the leukaemia service and the transplant programme. It has already been accepted that these are the patients at greatest risk of bacterial and fungal infection because of their profound and lengthy neutropenia and exposure to steroids. I would therefore have been aware of most, if not all, positive blood cultures.

I had an understanding of Infection Control to the level expected of a consultant in my position, but I had no expert knowledge of Infection Control. A Clinical Scientist from Microbiology carried out air sampling / environmental monitoring including laying plates to monitor for fungal infection. We had a very good relationship with her and daily communication. She would have made us aware of all positive blood cultures and any environmental concerns. In addition I remember her being accompanied to our meeting by a colleague on a Friday lunchtime when all positive microbiology was discussed.

I don't recall any serious concerns that the environment was unsafe. I do acknowledge that we saw positive blood cultures with organisms considered environmental However, as a clinician responsible for treating these infections/children my focus was on their pathogenicity and the vulnerability of the child rather than the source of infection. That was the responsibility of Infection Control.

I would add that 2005 is 20 years ago and remembering detail is difficult.

2. Incidence of environmentally relevant bacteraemia cases at Yorkhill

Please review the list of 'microorganism species of environmental concern' from 2005 to 2022 listed in Tables 11A to 11F of the HAD Report (Bundle 44, Volume 1, Pages 97 to 106) and the conclusion of the authors expressed on page 109 of the bundle that refers to the "significantly higher number of cases observed historically when the haemato-oncology paediatrics service was located at Yorkhill compared with QEUH cases". On the basis of your expertise and experience, to what extent would you accept that there was a significantly higher number of environmentally relevant bacteraemia cases in the paediatric haemato-oncology patient population at Yorkhill from 2005 to 2015 compared to the QEUH/RHC from 2015 to 2022? Please explain the basis of your answer.

The data are the data and if correct, they suggest that there were more environmental infections at Yorkhill than QEUH. The numbers for Yorkhill span almost 11 years against 7 years QEUH. The difference, although still in favour of QEUH, is less marked when corrected for bed days. This would not have been my impression and I am surprised that this is what the data suggests. Comparing the relative number of infections by site, I would previously have considered all positive blood cultures of concern rather than just those considered / determined as environmental. I think that I remember a senior nurse keeping a database of all blood cultures. However this could not be transferred to RHC/QEUH because the IT department could not support the system

3. **Rate of change of incidence of environmentally relevant bacteraemia cases between Yorkhill and QEUH/RHC**

Please review Figure 22 of the HAD Report and the text discussing it (Bundle 44, Volume 1, Pages 116 to 119) and the conclusion of the authors in the second bullet point on page 119 that "Among paediatric haemato-oncology patients, we see an ~2 fold decrease in incidence and cases of bacteraemia attributed to environmentally relevant microorganisms following transfer of services from Yorkhill to QEUH; lower incidence at QEUH was statistically significant". To what extent is this conclusion consistent with your experience at Yorkhill and subsequently at the QEUH/RHC? Please explain the basis of your answer.

This finding of a 2 fold decrease in infection rates at QEUH is not consistent with my impression as a clinician working on these Units. However if this data are correct it suggests that there was a decreased incidence of infection from environmental organisms at QEUH, although less marked than 2 fold when bed days are used to correct for the difference in years studied .

4. **Comparison between the susceptibility of adult haemato-oncology patients and paediatric haemato-oncology patients to bacteraemia attributed to environmentally relevant microorganisms**

From your own professional expertise are you able to assist the Inquiry as to the extent to which it is appropriate to consider that adult haemato-oncology patients as a class and paediatric haemato-oncology patients as a class have a similar susceptibility to bacteraemia attributed to environmentally relevant microorganisms?

If by class you are referring to age, I think that children may be more susceptible to infection than adults. Susceptibility to bacterial/fungal infection is related to depth and length of neutropenia, exposure to steroids and other immunosuppressants, the need for central venous access etc. Children and adults have a different disease spectrum. Adults are more likely to have chronic haematological disease and children nearly always acute disease. That determines treatment. Acute haematological disorders are more likely to require treatment which results in profound and prolonged neutropenia and steroid use. I would therefore expect the children to be more vulnerable, with the exception of transplant patients who may have an equal risk irrespective of age, because of similar lengths of neutropenia and a similar exposure to immunosuppressants.

If by class you are referring to organisms - susceptible patients will be equally at risk. However although perhaps more vulnerable to infection, children are more resilient and tolerate infection better than adults.

5. Specific infections of microorganism species of environmental concern at Yorkhill from 2005 to 2015

Accepting that much time has passed please review the list of 'microorganism species of environmental concern' from 2005 to 2022 listed in Tables 11A to 11F of the HAD Report (Bundle 44, Volume 1, Pages 97 to 106). Can you recollect any details of any of the investigations into the infections there listed at Yorkhill from 2005 to 2015 and whether any that occurred after the publication of the National Infection Prevention and Control Manual in 2012 were investigated as 'healthcare infection incidents' and/or reported to HPS?

I would not have been responsible for reporting Healthcare incidents to the HPS. I cannot recall attending an IMT or any other investigation of an infection caused by a "microorganism species of environmental concern "either before or after 2012. However, much time has passed.

6. IPC practice in the Schiehallion Unit at Yorkhill from 2005 to 2015

Accepting that much time has passed can you assist the Inquiry by giving an assessment of the extent to which at the Schiehallion Unit at Yorkhill from 2005 to 2015 the investigation of bacteraemia cases from potentially environmentally

relevant microorganisms such as those listed in Tables 11A to 11F of the HAD Report (Bundle 44, Volume 1, Pages 97 to 106) (a) formed a part of IPC practice, (b) were the subject of investigation by the IPC team and/or (c) were reported to HPS?

I can't recall any IPC investigations of infections potentially related to environmental organisms. I do not know if they were reported to HPS. Professor Craig Williams was the lead for IC and therefore there was a Control of Infection team responsible for monitoring the environment and acting on findings.

7. Awareness of risk of bacteraemia from potentially environmentally relevant microorganisms at Yorkhill from 2005 to 2015

Accepting that much time has passed can you assist the Inquiry by giving an assessment of the extent to which the awareness of and management of the risk of bacteraemia from potentially environmentally relevant microorganisms was a significant part of practice at the Schiehallion Unit at Yorkhill from 2005 to 2015?

Awareness of the risk of infection to the vulnerable patients we cared for at Yorkhill was always an important part of our clinical practice. The risk of bacteraemia from potentially environmentally relevant microorganisms was a part of this, and I would have had an awareness that the environment posed a risk and some of the organisms which were associated with water contamination. However, whenever an infection arose, as clinicians our priority was always how to best deal with this from a clinical perspective in terms of saving our patients' lives, rather than focusing on the source of infection, which was an issue for infection control. In these circumstances I would probably have been more concerned by the pathogenicity of an organism, whether it formed a biofilm, whether it was resistant to frontline antibiotics, whether the CVL should be removed, etc. For example, I can recall incidences of Pseudomonas and Stenotrophomonas at Yorkhill when we focused on getting the CVL out as soon as the patient was stable and to decide on the most appropriate antibiotics. Cotrimoxazole was the usual advice for Stenotrophomonas but because it can extend / increase the neutropenia it was not an antibiotic that the haematology team were comfortable with. Therefore, as a clinician, I can confirm that awareness and management of risk of both fungal and bacterial infections was an important part of my practice at the Schiehallion Unit at Yorkhill from 2005 to 2015. However, in terms of the source of those infections, and in particular whether they were environmental in origin would have been the remit of Infection Control. The organism causing a positive blood culture would have been identified in microbiology, the home of Infection Control, and this would then be communicated to the clinicians on the ward by a phone call from a microbiologist. I do not know whether the Infection Control team would say that management of the risk of bacteraemia from potentially environmentally relevant microorganisms

was a “significant part” of their practice on the Schiehallion Unit at Yorkhill from 2005 to 2015 but it was my understanding that it was within their remit.

8. CLABSI in the Schiehallion Unit at Yorkhill from 2005 to 2015

Accepting that much time has passed can you assist the Inquiry by giving an assessment of the extent to which at the Schiehallion Unit at Yorkhill from 2005 to 2015 any particular efforts were made to promote line safety of the sort later carried out at QEUH/RHC under the CLABSI (Central Line Associated Blood Stream Infections) from 2016?

I don’t remember there being a CLABSI group at Yorkhill. However the nursing staff who were those handling the CVLs followed the best clinical practice at that time and adopted any new recommendations.

9. Data Presented to IMTs in 2018 and 2019

Please review the Transcript of your evidence on 12 June 2023 at Col 176 when you mention that after the change of the Chair of the IMT “There was lots of data presented about rates of infections and Yorkhill and whether or no these were really any different from what we had seen since the move”. Do you have any opinion as to whether rates of infections at Yorkhill were really any different from those you had seen since the move to the RHC? What is the basis for your opinion?

Early after moving to the QEUH the clinicians did feel that they were seeing an increase in unusual gram negative bacteraemia. We thought that we were seeing organisms that we hadn’t seen before and raised this with microbiology including questioning whether this was a real change or due to something as simple as the renaming of organisms. I definitely had concerns in 2017 when we saw a number of outbreaks of viral gastroenteritis - norovirus and rotavirus -and concerns about suspected cases of fungal infection. Although the number of the latter was small, even two suspected fungal infections would have raised concerns. As clinicians we were not in a position to look back over a number of years and decide if we were seeing a true increase or a pattern of normal fluctuation. Our responsibility was to raise any potential concerns with Infection Control and allow them to decide if there was a problem or not. That is their job not ours. Ours is to treat the patient.

10. Enteric Infections

The Inquiry has heard evidence that some Bloodstream Infections (‘BSI’) can arise by breakthrough from the patient’s gut. It has been suggested that that the Inquiry would be entitled to assume that if you and your colleagues considered that one of your patients had such an infection as a result of gut breakthrough such a case would not require to be escalated to a PAG or IMT within the IPC system. Do you have a view on this?

I am not sure who would suggest this to the Inquiry and it is not correct. The need for an IMT or PAG related to an episode of infection, at least after relocation to RHC /QEUH, was decided by Infection Control and Infection Control alone. They decided on the need for the meeting, arranged the meeting and sent out the requests to attend. The clinician attended to provide a background on the patient and an update on their condition. Whilst there was discussion around the source of the infection and clearly that was important, the clinical team focused on whether the infection was line related i.e. colonising the line, forming a biofilm and unlikely to be eradicated without line removal or whether there was an alternative source for the infection ie the gut when the central line could be saved. However the two possible sources were not mutually exclusive and consensus not always reached. Infections could originate in the gut and could still colonise the line which would require removal. The IMT/PAG would try to reach consensus on the source and the need to remove the line. The removal of a central line is not the only issue – it is the establishment of peripheral venous access to deliver antibiotics before a second line can be sited. Siting of a second central line whilst there is still circulating bacteria risks infecting the second line but obtaining peripheral venous access in a small child can be very difficult. Clinicians were asked to document that they had told the parents the name of the organism and the decision re the need for line removal. If we were unable to site a peripheral line because of technical difficulties this had to be recorded. There were some instances when we knew that it would be impossible to gain further central access and because interrupting treatment was clinically unacceptable we continued to use the line with the knowledge that there was risk, but it was the lesser of the two risks.

11. Polymicrobial BSI

Can you assist the inquiry as to whether there was any change in the number of patients presenting with multiple microorganisms in a single blood culture (that might be referred to as polymicrobial BSI) between Schiehallion at Yorkhill and Schiehallion at the RHC?

I can't remember /know the respective numbers but this occurred at both sites. We considered that a definite line infection and removed the CVL. I assume that microbiology/ Infection Control can answer this with accuracy.

12. Clinical Output Specification for the Schiehallion Unit

You discuss your involvement with the planning of the new Schiehallion Unit from paragraphs 78 to 90 of your statement and the specification of the old Yorkhill Unit at paragraphs 100 to 102. The Inquiry has been provided with the Clinical Output Specification for the Paediatric Haemato-Oncology Ward (Bundle 16, Document 16, page 1599) which appears to have been produced by a date in the first half of 2009.

a) Did you or any of the clinicians within the Schiehallion team have any involvement in the production of this Clinical Output Specification?

I have no recollection of ever having seen this document, or having been involved in its production and know of no one else being involved, but clearly can't be certain.

b) To what extent does section 7 of the Clinical Output Specification adequately define the ventilation needs of the Schiehallion patient specification with reference to the need for HEPA filtration, pressure gradients and air changes?

It does not describe the ventilation needs of the Unit .There is no mention of the number of air exchanges or pressure gradients. It refers to a double door system to enter the ward. My recollection is that these were not installed although they were after the renovation.

13. Isolation Rooms September 2011

The Inquiry has an email exchange between Mairi MacLeod and Coral Brady from September 2011 (Bundle 46, Volume 3, Document 5, Pages 716 to 717) about air filtration systems in the new transplant rooms, parts of which were copied to you. Can you remember how this exchange arose and what information about HEPA filtration for the new Schiehallion Unit was reported back to you at that time?

Coral Brady was our Business Manager and Alanna McVeigh the Quality Manager for JACIE for the paediatric Transplant Unit .Transplant Units which relocate have to be re-inspected within 6 months of relocation. Ms McVeigh was asking for the information on HEPA filtration via Coral Brady for this application. To the best of my knowledge the response from Mairi MacLeod was that there was a technical team working with the Project team on this and that we would be involved when required and no further details were provided. This is what was reported back to me. These discussions were at a management / Project management level. All communication was via Mairi MacLeod and we had no direct access to the technical team.

14. Isolation Rooms July 2014

The Inquiry has an email exchange between Mairi MacLeod and Janis Hughes from July 2014 (Bundle 46, Volume 3, Doc 4, pages 713 to 715) about isolation rooms and the Schiehallion Operational Policy parts of which appear to have been p0copied to you. Can you remember how this exchange arose and what information about the numbers and types of isolation rooms for the new Schiehallion Unit was reported back to you at that time?

The number of rooms were as expected from the Schiehallion model. I think that the issue was whether or not there could be a negative pressure isolation cubicle suitable for a transplant patient with a viral infection whose excretions one would not want to be cleared into the corridor and infect other patients / relatives/staff. It is possible to have negative pressure isolation rooms for this purpose. I have read the email chain. I don't remember the role of Janis Hughes. However, I would have expected Mairi MacLeod who I assume has no expert knowledge of ventilation to have passed the query to the technical team and asked them to make direct contact. This did not happen.

15. Mr Seabourne's Email of 23 June 2016

The Inquiry has an email from Mr Seabourne who was the Project Director during Stages 1, 2 and the start of Stage 3 to Mr Hall of Currie & Brown dated 23 June 2016 in respect of the ventilation (Bundle 12, Document 104, Page 813). To what extent were you aware of the narrative set out in his email and are you able to assist the Inquiry as to whether you consider the narrative to be accurate?

I note that I was not copied into any of this email exchange and I don't know if the narrative is accurate or not.

16. Additional information to assist the Inquiry

The Inquiry is attempting to understand the extent to which it can be said that the adequacy of ventilation, water contamination and other issues have or have not adversely impacted patient safety and care at the QEUH/RHC. Do you have any further information that you have not yet given the Inquiry that you consider would assist the Inquiry in understanding that issue?

I would like to take this opportunity to explain my unhappiness with the facilities provided at the RHC which features in a number of Witness Statements and how I believe this impacted on patient care. I totally accept that I was / am the architect of a Unit believing in the merits of a team and of a close relationship / environment of staff to families / children and that the move to RHC/QEUH was sking a move to an environment of distance from essential clinical staff to patients /families.

Children and their families cared for in our Unit may be resident for a prolonged period and should be provided with acceptable family friendly accommodation, particularly when many Charities would furnish this given appropriate space.
I have no recollection of signing off the plans for the Unit prior to relocation. I repeatedly refused to do so because of the inadequacy of the accommodation. However I was under great pressure to do so and may have relented under duress and some inappropriate behaviour. I note that the architect who has

written the most detailed and referenced Witness Statement cannot locate a sign off.

This had nothing to do with concerns of risks of infection related to water, drains or ventilation. I never considered that such issues would arise. I expected and trusted Facilities / Estates and Control of infection to guarantee us a safe environment.

However we were promised a like for like facility and this we did not get. There was no parent accommodation; pharmacy - one of the most important disciplines in the team was accommodated in what could as best be described as a large cupboard; there was no accommodation for Social Work; medical staff were accommodated in an office block 10 minutes at best from the ward; non-ward nursing staff used hot desking. Interaction with the Project team was unhelpful and unconstructive. Any request for more space was met with charges that our discontentment was solely due to our discontentment about the loss of Offices on the ward. We did succeed with the help of a group of parents to persuade management to convert a room into a parent's kitchen where mothers could at least make a cup of coffee, but failed to persuade Management of the clinical need to have experienced medical staff close to a vulnerable patient group – transplants - who could become critically ill very suddenly. From charitable funds we also paid for addition accommodation at Marion House which was Young Lives accommodation for our families. We lost our school room and other facilities.

In 2022 after the renovations these concerns were recognised and what changes that could be made were made. A cubicle was converted for the use of pharmacy and office space adjacent to the ward, which had been for administrative use, was given over to the Transplant team who were the group looking after the sickest patients. Edinburgh learnt from the error of the West and although medical accommodation was communal, it was located adjacent to the ward.

Declaration I believe that the facts stated in this witness statement are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

Signed: [redacted] Print name: BRENDA GIBSON

Date : 30:7:25

Appendix A

A43255563 - Bundle 1 – IMT Minutes

A43293438 - Bundle 6 – Miscellaneous Documents

A43940545 - Bundle 7 – Reports prepared by HPS, HFS and ARHAI

A47069198 - Bundle 12 – Estates Communications

A47851278 - Bundle 16 – Ventilation PPP

A48381842 - Bundle 19 - Documents Referred to in the Quantitative and Qualitative Infection Link Expert Reports of Sid Mookerjee, Sara Mumford & Linda Dempster.

A49871632 - **Bundle 27, Volume 6** – Miscellaneous Documents

A52317814 - **Bundle 44, Volume 1** – NHS GGC Expert (HAD Report)

A52859616 - Bundle 46, Volume 3 – Correspondence on Potentially Deficient Features