

Inquiry Witness Statement of

Dr Musa AL-SHAMMA

1. My full name is Musa Al-Shamma. My contact details are known to the Inquiry.

BACKGROUND

2. I completed my MbChB (Batchelor of Medicine, Batchelor of Surgery) at Baghdad University in 1973 and my MSc at Glasgow University and also my MRCP (Member of the Royal College of Physicians) in 1982. In 1990 I was elected to the FRCP (Fellow Member of the Royal College of Physicians).
3. In 1993 I carried out research work at the Western Infirmary in Glasgow. I was also a Clinical Honorary Senior Lecturer in Medicine at Glasgow University.
4. In February 1996 I commenced working at The Vale of Leven Hospital ("VOLH") as a locum consultant physician and in May 1996 I became a substantive appointee as a consultant in general and respiratory medicine. Respiratory medicine is my field of expertise.
5. I currently work an on call rota with other consultants. This is a one in four rotation and I am on call from 0900hrs on a Tuesday until 0900hrs the following morning and on call every fourth weekend from Friday morning until Monday morning. I also carry out a ward round on Saturday and Sunday mornings when I am on call.

6. On weekdays I see all of my own patients in each ward of the hospital, but at weekends I see new admissions and those patients who are seriously unwell on the ward and all patients in the High Dependency Unit ("HDU") and the Coronary Care Unit ("CCU").
7. On Wednesday I conduct a respiratory clinic and on Thursday I conduct a general clinic which may also include respiratory patients. I also attend a weekly Multi Disciplinary Team Meeting ("MDT") for lung cancer patients.
8. My line manager is the Clinical Director, Professor Martin McIntyre. My previous line manager was Graeme Currie.

Infection Control

9. I have received training throughout my career in infection control and also ongoing updates with regard to various infections. The onus does, however, lie with the individual to update themselves with regard to infections. I am unable to comment on whether there are any formal checks in place to ensure that staff have read and understood any such updates.
10. In December 2008 there was an Infection Control training course which I attended. This course lasted about two hours and was conducted by the Infection Control Nurse ("ICN"), whose name I do not recall. It is my belief that this training came about as a result of the *Clostridium difficile* ("C.diff") outbreak at the VOLH.

11. I am aware that following the outbreak there is an Infection Control Manual ("ICM"). I have been shown a copy of the ICM and I have no recollection of ever seeing this document before. I have no knowledge if this was held on the wards at the relevant time and do not believe there was any formal ICM for staff at the time.
12. I am aware of the Scottish Surveillance Programme for *Clostridium difficile* Associated Disease ("CDAD"). I believe that had figures been properly audited during the outbreak and something significant risen I would have expected to have received some form of communication regarding this.
13. I understand an outbreak, with particular reference to *C. diff* to be two or more cases on a ward where the patient has not been admitted with the condition. It would still constitute an outbreak if the patient became symptomatic within four weeks of using a course of antibiotics for this condition.
14. At the time of the outbreak I believe there was an ICN who was based at the Royal Alexandra Hospital ("RAH") in Paisley but would attend the VOLH if required.
15. I believe that all staff have now had Infection Control training. As far as I am aware there is now an ICN based at the VOLH and a microbiologist based at the RAH accessible 24 hours a day.
16. During the time of the outbreak I covered Wards 3, 4 and 6. I am not aware that there was a higher than average incidence of *C. diff* during that period.

VOLH at the Time (1 DEC 07 – 1 JUNE 08)

Cleaning

17. I do not believe that the VOLH was any less clean than the Western where I had previously worked.

18. I do not remember a 'deep clean' at the VOLH during the outbreak. I am aware that wards are often closed due to gastro-enteritis and the wards are then thoroughly cleaned afterwards.

Beds

19. I am not certain if there was a policy regarding bed spacing at the time of the outbreak. I am aware that there is now a minimum required space between beds. I would not say that during the outbreak period that the wards were overcrowded as compared to other hospitals.

Staffing

20. I believe that the circumstances regarding talks of closure of the VOLH may have caused a lack of morale amongst staff but this did not affect the performance of the staff.

Clostridium difficile

21. If a patient becomes symptomatic or tests positive for *C. diff* toxins they should immediately be isolated. Personal Protective Equipment ("PPE") namely gloves, masks and apron should be worn. This should apply until at least three negative results have been obtained. I believe that these measures were in place at the relevant time.

22. I am not aware that symptomatic patients were co-horted. I do not believe that this is appropriate with *C. diff* or any other infectious condition.
23. I always adhere to the appropriate hand hygiene policy and ensure, where necessary, to ensure that any other person also does so.
24. I have never contracted *C. diff* and I am not aware of any staff at the VOLH ever contracting *C. diff*. If any member of staff became symptomatic I would not expect them to be working.
25. I believe the treatment for *C. diff*, Metronidazole and Vancomycin, to be effective.
26. I am aware that there is now an antibiotic prescribing policy which is different from the policies we had in 1997, 2000 and 2006. It must be borne in mind that *C. diff* is not caused only by the overprescribing of broad spectrum antibiotics.
27. I believe that the training conducted in December 2008 was a direct consequence of the creation of the Outbreak Control Team.
28. I am aware that an Antimicrobial Management Team was created. This has brought a number of benefits such as ward changes, more Infection Control guidelines and their greater availability to microbiologists.

TREATMENT OF CERTAIN PATIENTS

Thomas McGowan

Reason for Admission

29. Thomas McGowan was first seen by me on 25th March 2008 at 1000 hours. Mr McGowan was transferred from the Royal Alexandra Hospital ('RAH') on 24th March 2008. I noted a diagnosis of right lower lobe pneumonia, urinary sepsis and acute renal failure which had been resolved. When I examined Mr McGowan he was pyrexial with a temperature of 38.1°C. He had bilateral crepitations in his chest. I requested that Mr McGowan's chest be X-rayed and this showed right basal shadowing of the lung. This entry can be found at **(GGC00430016)**.

30. I think Mr McGowan was on Ward 3 as this was our male general medical ward. He was transferred from the RAH because he no longer require treatment within the Intensive care Unit or ventilation there and he was a patient from the VOLH catchment area.

31. Mr McGowan had already been started on Augmentin at the RAH and I continued with this antibiotic as he had apparently been responding well to treatment. Augmentin is a broad-spectrum antibiotic and would have covered treatment for both Mr McGowan's chest and urinary infections.

32. I next saw Mr McGowan during a ward round on the 27th March 2008. I noted that he was much better breathing wise but his mobility was still poor. Mr McGowan's CRP (C-reactive protein), which is used in medicine as an inflammatory marker, had come down from 186 to 45 which was a sign of improvement. This entry can be found at **(GGC00430017)**.

33. The plan was to refer Mr McGowan to the Care of the Elderly ward for further rehabilitation. There is an Internal Patient Transfer Document within Mr McGowan's medical records at **(GGC00430269)**. This shows that Mr McGowan was transferred to ward 14 on the 27th March 2008 and was not incontinent of faeces at this date. I did not see Mr McGowan after this date.

34. There is a microbiology department print out at **(GGC00430120)** showing that on the 24th March 2008 Mr McGowan was screened for MRSA and found to be negative. This screening is routine for any patient admitted from another hospital.

Diagnosis of *C.diff*

35. There is a microbiology department print out of the 27th March 2008 at **(GGC00430161)** showing that *Clostridium difficile* Toxin A and B was detected within a sample taken from Mr McGowan. However, I had no involvement with this patient during the time he was *C.diff* positive.

Margaret Gaughan

Reason for Admission

36. Ms Gaughan was admitted to Ward 6 of the VOLH under my care on the 1st January 2008. I noted her principal diagnosis as Lower Respiratory Tract Infection ('LRTI') at the Admission Problem List form at **(GGC00220011)**. In the medical records at **(GGC00220020)** I have noted that Ms Gaughan had been complaining of a cough with phlegm and breathlessness for two weeks prior to admission. She was febrile with a temperature of 38°C and wheezy with a respiratory rate of 20. Ms Gaughan was treated with Augmentin and Clarithromycin which is a

narrow spectrum antibiotic. These antibiotics would be used to treat Ms Gaughan's chest infection. I have also noted that Ms Gaughan had renal impairment.

37. I next saw Ms Gaughan on the 5th January 2008 at 0930 hours. The entry for this can be seen at **(GGC00220022)**. I discussed with the on-call microbiologist the antibiotic treatment. The microbiologist advised to commence Moxifloxacin which is a broad spectrum antibiotic.

38. Ms Gaughan was transferred to the RAH on the 7th January 2008 as she became unwell, she possibly required ventilation. An X-ray carried out at the RAH on the 7th January 2008 showed right upper and lower zone opacity due to community acquired infection. This entry can be seen at **(GGC00220024)**.

Re-admission

39. Ms Gaughan was transferred back to the VOLH on 10th January 2008 and seen by Dr Akhter. I next saw Ms Gaughan on 15th January 2008. It is noted at **(GGC00220030)** that she had crepitations in the left side of her chest and was on oxygen. She had not responded to the prescribed antibiotics and her condition had complicated as a result of the hospital acquired pneumonia. She was prescribed Ceftriaxone and all other antibiotics were ceased.

40. It is noted at **(GGC00220033)** that I saw Mrs Gaughan on 17th January 2008 when I noted that she had left ventricular failure and was to be continued on the Ceftriaxone.

41. It is noted at **(GGC00220034)** that I then saw her on 21st January 2008 where I noted she was responding well to the antibiotic and was to be continued on the Ceftriaxone for 3 more days. She was on Ceftriaxone from 15th January 2008 to 24th January 2008.

42. It is noted at **(GGC00220036)** that Mrs Gaughan was transferred to the care of the elderly ward, Ward 15 on 24th January 2008. This would have been for rehabilitation. I had no further contact with Mrs Gaughan.

Diagnosis of *C.diff*

43. I see from the notes that a microbiology laboratory print out at **(GGC00220121)** shows Mrs Gaughan had a stool sample tested for *C.diff* which was found to be negative on the 11th January 2008. It is not recorded in the medical records why this sample was requested.

44. There is an entry at **(GGC00220048)** of the 31st January 2008 that indicate Mrs Gaughan had diarrhoea. There is a microbiology laboratory print out at **(GGC00220120)** which shows that she was positive for *C.diff* toxin on 31 January 2008.

Charles Cook

Reason for Admission

45. Charles Cook was admitted to the VOLH on the 1st May 2008. I first saw him on the 2nd May 2008. I have noted at **(GGC00130014)** that he had decreased mobility, a high temperature of 37.7°C, his CRP was high at 186, his white blood cell count was high at 13.4, his blood pressure was low at 103/72, his urea and creatinine were high. I felt that the patient was septic the primary source of which was a urinary

tract infection. I requested a urine culture and started him on the antibiotic Ciprofluoxacin 250 mg twice a day.

46. Mr Cook was then transferred up to the care of the elderly ward on the 2nd May 2008 at 1500 hours. I had no further involvement with this patient. It is noted at **(GGC00130074)** that a sample he provided tested positive for *C.diff* on 7th May 2008 but I had no involvement with the patient at this time.

Margaret Thompson

Reason for Admission

47. Margaret Thompson was admitted to Ward 6 of the VOLH on 15th January 2008. She was a 65 year old female suffering from Chronic Obstructive Pulmonary Disease ("COPD"). I examined Mrs Thompson at 1400hrs **(GGC00540023)**.

48. On examination of Mrs Thompson I found crepitations in her right lung and a subsequent chest x-ray showed an abscess in the right lung **(GGC00540072)**.

49. I prescribed Fluloxacillin, a narrow spectrum antibiotic, and also Ceftriaxone, a broad spectrum antibiotic as these would cover all possibilities of infection. Both of these antibiotics were prescribed within the 2006 Adult Drug Formulary guidelines.

Diagnosis of *C.diff*

50. I see from her notes **(GGC00540024)** that she was seen by an FY2 on 16th January 2008, who reported 2 x loose stools and requested a stool sample be tested for culture and sensitivity. I see that this sample

came back positive for *C.diff* on the same day (**GGC00540078**). I note from the drug cardex that she was prescribed Metranidizole which commenced on 18th January 2008.

51. I next saw Mrs Thompson on 17th January 2008 (**GGC00540024**) and noted that the patient was not improving and I requested a sputum sample tested for culture and sensitivity and also for a Tuberculosis culture. I noted that she should continue with the antibiotics that I had prescribed when I first saw her.

52. My next involvement with Mrs Thompson was on 21st January 2008 (**GGC00540025**). She was still expectorating green phlegm and I noted to chase the results from the samples sent to Microbiology on 17th January 2008. I suspected that she may have had MRSA in her chest. I saw her next on 24th January 2008 and there was no change in her condition. I spoke to Mrs Thompson's daughter and agreed on a Do Not Attempt Resuscitation ("DNAR") order (**GGC00540006**).

53. I then saw Mrs Thompson on 29th January 2008 (**GGC00540028**) and noted that she was feeling better and had no further diarrhoea. It was my opinion that the *C.diff* had cleared up and that she should continue purely with the antibiotics for her lung condition.

54. I last saw Mrs Thompson on 31st January 2008 (**GGC00540029**). She was still having green sputum and it was my decision to repeat and continue with the antibiotics for her lung condition. I had no further involvement with this patient after the 31st January 2008.

55. It is my opinion that Mrs Thompson clearly responded to the Metranidizole as her diarrhoea had stopped on the 28th January 2008 and I was happy that her *C.diff* had cleared up.

56. I believe that I may have discussed *C.diff* with her daughter at the time that I discussed the DNAR. When the DNAR was discussed, however, this had nothing to do with *C.diff* as this was treatable and would not count towards her co-morbid conditions.

Death

57. It is my opinion that *C.diff* did not have any influence on Mrs Thompson's prognosis or condition. I had no involvement with the issue of her death certificate.

Alister Johnston

Reason for Admission

58. Mr Johnston was admitted to Ward 3 of the VOLH on 22nd December 2007 with a Lower Respiratory Tract Infection ("LRTI"). I did not see this patient at the time of his admission (**GGC00300029**).

59. On the 2nd and 3rd January 2008 I saw Mr Johnston at the request of Dr McCrudden, purely for his chest condition (**GGC00300040**). I reviewed Mr Johnston on 4th January 2008 (**GGC0300042**) and noted that his level of infection remained high and decided to change his antibiotics to Levofloxacin, as this is a better antibiotic for severe chest infections.

60. I next saw Mr Johnston on 10th January 2008 and noted that a CT scan of his chest showed a 'ground glass picture'. The patients' condition appeared to be becoming progressively worse and I prescribed Prednisalone, which is a steroid anti-inflammatory for lungs (**GGC00300043**).

61. On 22nd January 2008, I again saw Mr Johnston regarding his chest condition (**GGC00300046**). I have noted that his bronchoscopy was negative and that he should continue with Prednisalone to suppress the inflammation in both of his lungs.

62. I see from his notes that on 21st January 2008, Mr Johnston had soft stools (**GGC00300046**) and that on 22nd January 2008 he commenced a course of Metronidazole (**GGC00300149**). I had no further involvement with regards to Mr Johnston's care after the 22nd January 2008.

Annie Shaw

Reason for Admission

63. My first involvement with Annie Shaw was on 8th February 2008 when she was transferred to Ward 6 of the VOLH from the RAH. I see from her notes that Mrs Shaw had been transferred to the RAH from the VOLH on 28th January 2008 for a surgical opinion, query Ischaemic colitis (**GGC00510122**). I noted that whilst in the RAH, the patient had been prescribed Tazocin, a broad spectrum antibiotic used to treat LRTI.

64. When I saw Mrs Shaw on 8th February 2008 I noted that her diarrhoea had stopped. I was aware from her medical notes that she had previously been suffering from diarrhoea. On physical examination I found her to be quite chesty, with crepitations in both lungs. My clinical diagnosis was that Mrs Shaw had hospital acquired pneumonia, although I cannot say where she acquired it.

65. I prescribed Ceftriaxone for the hospital acquired pneumonia and had no further involvement with this patient. During the time that I saw her she did not display any symptoms of *C. diff.*

Elizabeth Valentine

Reason for Admission

66. The patient, Elizabeth Valentine, was admitted to Ward 6 of the VOLH on the 8th February 2008 with hypercalcaemia (**GGC00800013**). She was known to have suffered from rheumatoid arthritis and poly-myalgia (rheumatica).
67. I first saw Mrs Valentine on the 9th February 2008 and noted that her chest x-ray had shown shadowing of the left lung, which was consistent with infection (**GGC00800045**). I was aware that she was on a course of Ciprofloxacin which had been prescribed by her own GP. I requested IV fluid to rehydrate her and to reduce the high calcium level (3.23) and commenced with Furosimide. I also requested an ultrasound of her neck.
68. I next saw Mrs Valentine on 12th February 2008 (**GGC00800047**) and noted that she should continue with the treatment until her calcium level fell below 3. I also requested an ultrasound of the abdomen because of the high calcium level I suspected the possibility of cancer.
69. On 14th February 2008 I again saw Mrs Valentine (**GGC00800051**). I have noted that she was very confused and that her calcium levels were almost normal at 2.75, although her level of infection ("CRP") had increased to 125. I decided to stop the treatment with the Ciprofloxacin and commenced a course of Augmentin instead.
70. On 19th February 2008 I saw Mrs Valentine (**GGC00800053**) and noted that her condition was, essentially, unchanged, although she was no longer confused. I requested that her blood test and tumour markers be chased. On 21st February 2008 I saw the patient again

(**GGC00800054**) and requested a colonoscopy for possible cancer of the colon.

71. I see from her notes that the microbiologist, Dr Clarkson, had called with provisional blood results which showed 'staph'. He had suggested that should her condition deteriorate IV Vancomycin should be commenced (**GGC00800055**)
72. I see further from her microbiology reports (**GGC008000173**) that Mrs Valentine had tested positive for *C.diff* on 21st February 2008 and that she was commenced on Metronidazole that evening, although this does not appear to have been recorded in her medical notes.
73. I then saw Mrs Valentine again on 29th February 2008 (**GGC00800059**) and I have noted that her CT scan showed malignant peritonitis, but did not indicate the primary cause of the cancer as it has spread beyond the initial organ. I have noted further that I had discussed the results of the CT scan with her family and also that the patient should continue with Metronidazole.
74. On 3rd March 2008 I saw Mrs Valentine (**GGC00800060**) and have noted that her condition had deteriorated significantly and that I had discussed the DNAR with her family and that the form had been completed (**GGC00800006**). Due to the malignant peritonitis her prognosis was extremely poor and she was afforded palliative care. Her family were fully aware that Mrs Valentine was unlikely to recover.
75. Mrs Valentine died on 8th March 2008. I had no involvement regarding the issue of her death certificate.
76. Metronidazole ceased to be prescribed to Mrs Valentine on the 6th March 2008. In my opinion *C.diff* had no influence whatsoever on her condition or prognosis prior to her death.

77. I have no objection to my witness statement being published as part of the evidence to the Inquiry. I believe the facts stated in this witness statement are true.

Signed..

Dated...16/8/2010.....