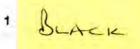
Report on the Care and Death of Helena Service 5th June 1997 Draft: 6th November 2004

This report has been provided by Dr David A Black, MA MB BChir (Cantab) FRCP, Consultant Physician at Queen Mary's Sidcup NHS trust. This report is in two parts, a factual summary of time line including important investigations and in the second part an opinion on the events that occurred. The numbers in brackets refer to the pages of evidence to support the statements.

1. Timeline

- 1.1. Mrs Service's hospital notes start in 1991 when she is investigated for difficulty in swallowing (102) this was initially thought to be a cancer (101). She is noted to be in atrial fibrillation (99) and eventually has a major abdominal operation (a partial gastrectomy) (99), which finds that she has benign gastric ulcer disease (no cancer). She has no complications following surgery.
- 1.2. In 1994 she is admitted with a stroke causing a left sided hemiplegia (weakness), she remains in atrial fibrillation has high blood pressure (94) and spends 4 weeks in hospital (86-87). Her heart is documented to be enlarged at that time (229). A home visit (92) shows that she is slow but independent, but her "memory is poor" (90).
- 1.3. 1987 progression of her profound deafness due to otosclerosis is documented (81).
- 1.4. In 1988 she presents with a high blood sugar (diabetes mellitus) unmarsked because she was started on steroid tablets for a presumed diagnosis of polymyalgia rheumatica. She has a week of inpatient care (79). Her mental test score is documented at 9/10 (79).
- 1.5. In 1992 she is admitted having been found on the floor with a new stroke and new left sided weakness (70). She is thought to be confused but her mental test score is again documented at 9/10. Albumin is 31; haemoglobin is 10.9 (70).
- 1.6. In January 1995 she has now moved into a residential home. A visit to the home finds that she is in congestive cardiac failure with mitral regurgitation and it is thought she is likely to need hospital admission (68 69). She is subsequently admitted to hospital for a week and is noted to be in quite severe congestive cardiac failure on admission (58-59)



- 1.7. After admission needs a week in hospital where her medication is altered and she returns to her residential care (56 57). She now has significant documented dependency with a Barthel of 10/20 (326).
- 1.8. In January 1996 she is admitted with a diagnosis of gout and dehydration. Her Barthel is 3/20 on admission and 6/10 on discharge (11). Her Waterlow score is 30 on 27th January (12) giving her a very high risk of pressure sores. Very poor mobility is documented (13) despite this, she returns to her residential care home (54).
- 1.9. The notes from her residential home show that she is declining in health in May 1997, for example, her bedsores have started bleeding in the residential care home notes (283).
- 1.10. On the 17th May 1997 at the age of 99 she is admitted at the request of her GP to hospital with confusion, disorientation and progressive failure for the rest home to be able to cope. (51 –52). She is now on Melleril (Thioridazine) a major tranquilliser often used for people who are confused and disorientated. She is thought to be dehydrated (156). Admission creatinine is raised 151 (157). She is found to be markedly hypoxic (PO2 of 6.7, PCO2 of 5.6 (157) and is diagnosed to have a combination of "dehydration and left ventricular failure" (158).
- 1.11. She is thought to make some progress. However on the 20th May she is sleeping in a chair. Her creatinine has fallen with, rehydration, to 114 (159).
- 1.12. On 26th May she is noted to have a possible new left sided weakness due to a new stroke (160). The nursing notes 26th May (296) she "remains confused". They also note (303) that after 26th May she remains totally dependent "transfers with two". Social Services assessment on 27th May (276) records a maximum Barthel of 4.
- 1.13. On 28th May she is referred to the geriatric team, her Barthel remains 4 (162). Dr Ashbal sees her on 29th May and records that she has had long standing congestive cardiac failure, is deaf and he is clear that she will not return to a level of function that will allow her to return to the residential home. He says that he will arrange transfer to the Gosport Memorial Hospital "with a view to considering continuing care" (39).
- 1.14. The medical notes at the Queen Alexander record no obvious change in function but the nursing notes for the 2nd June (296)note that she was "very demanding overnight, shouting out continuously". This suggests that she was acutely confused. Also on the 2nd June she remained continuously breathless and

needed to be "nursed upright all night" (298)

1.15. On 3rd June she is transferred to the Gosport War Memorial Hospital. The transfer note (164) states that she is confused, "off legs", has diabetes and heart failure. There is an examination recorded, which states that she is breathless and lethargic, there is a "gallop rhythm" with normal first and second heart sounds, chest was clear. Written undemeath the examination record, the notes state "needs palliative care as necessary" and "happy for nursing staff to confirm death".

Barthel of 0/20 on admission to Gosport is documented. (24).

There were no further medical notes apart from a nursing note confirming that she had died peacefully at 3.45 am 5th June 1997.

- 1.16. The nursing cardex on admission to Gosport (22) documented "very pleasant lady" and a buttock bedsore.
- 1.17. At 02.00 on 4th June she was noted to be very restless and agitated and Midazolam 20 mgs over 24 hours is started by syringe driver.
- 1.18. On 4th June it is documented that she has deteriorated overnight and the syringe driver is replaced by Diamorphine 20 mgs and Midazolam 40 mgs. She continues to deteriorate and dies at 03.45 on 5th June (22).
- 1.19. Drug Chart Analysis:

1996 Drug Chart shows nothing unusual and the only drugs on the "as required" side are Temazepam and Metaclopamide (260). When she is admitted to the Queen Alexander Hospital (269-273) she is on Zestril, Bumetanide, Aspirin and Digoxin for her heart disease and atrial fibrillation, Allopunnol for her gout. On the "as required" side, Thioridazine (which is then given it each night as a sedative), and Paracetamol.

1.20. In 1997 on admission to Gosport: Bumetanide, Lisinopril, Lanoxin, Aspirin are all continued with Allopurinol and all these drugs are given to her on both 3rd and 4th June. (38). On the "as required" side Diamorphine 20 – 60 mgs subcutaneously in 24 hours is written up, also Hyoscine 200 – 400 micrograms and Midazolam 20 – 40 milligrams (37) all in 24 hours. Midazolam is started at 2.15 am on 4th June (37) 20 mgs for 24 hours and is then replaced with 20 mgs Diamorphine with 40 Midazolam at 9.20 am on 4th June.

A single dose of Diamorphine 5-10 mgs i/m is also signed for on the once only section of the drug chart, (37). It is not dated α timed and it is not clear if this was even given.

2. Expert Opinion:

- 2.1. This section will consider if there are any actions so serious they might amount to gross negligence or any unlawful acts or deliberate unlawful killing in the care of Mrs Helena Service. Also if the actions or omissions by the medical team, nursing staff or attendant GP's contributed to the demise of Mrs Service, in particular, whether beyond reasonable doubt, actions or admissions more than minimally, negligently or trivially contributed to death.
- 2.2. In particular, I will discuss a) whether Mrs Service had become terminally ill and if so whether symptomatic treatment was appropriate and b) whether the treatment provided was then appropriate.

Mrs Service's hospital notes go back for 16 years prior to her death. They document that she has heart disease with an irregular heartbeat (atrial fibrillation) in 1981 and heart enlargement in 1984 (229). She also has two previous strokes documented in both 1984 and 1992. (86 and 70). The natural history of heart disease is in general for progressive decline over time, with a very poor prognosis once serious heart failure has developed, as documented on this lady in 1995 (58-59).

- 2.3. She is also profoundly deaf which leads to communication difficulties and makes a patient more likely to get acute confusion. She suffers from Diabetes Mellitus, which is unmasked when she receives steroid treatment for polymyalgia rheumatica, she is also thought to have had an episode of gout and has been dehydrated with impaired kidney function on at least two occasions.
- 2.4. Despite her noted physical frailty she eventually makes a good recovery from a stroke in 1984, (92). By 1995 she has moved into a residential home. We do not know what precipitated this, however in 1995 her Barthel is documented at only 10/20 (326) meaning that she required considerable help with her routine activities of daily living.
- 2.5. In 1996 she is admitted with gout, and is found to be profoundly dependent on admission with a Barthel of 3/20 (11), which improves to 6/20 on discharge. Very poor mobility is noted and she has a Waterlow score which is a risk score for pressure sores (12) of 30 putting her into a very high-risk category. There is no doubt that this lady would normally be cared for in a nursing home, with this level of dependency, or even in NHS continuing care if she had not already been living in a residential home that was committed to

her care.

- 2.6. By the time she is admitted on 17th May 1997 she has been progressively failing in the residential home (283). It seems unlikely that this was a dramatic change in function, but the end point of a slow deterioration of her multiple illnesses, including her progressive heart disease, her cerebro-vascular disease and of course the physiological frailty of an age of 99 years.
- 2.7. When admitted to hospital she was found to be both dehydrated and in again heart failure. This is often a combination suggesting poor prognosis. She has acute confusion (delirium) and this does not resolve, although it does fluctuate, during all her time in the Queen Alexander Hospital. Investigations on admission found she is dehydrated with a raised creatinine of 151 (157) but she is also markediy hypoxic (low oxygen in the blood) with a PO2 of 6.7 kPa (normal range 12.7+0.7) with a PCO 5.6 kPa (normal range 5.3+0.3) She is now very unwell, and highly dependent with a Barthel at best 4/10 (162). On the basis of the nursing notes she makes very little improvement in her confusion or her breathlessness and indeed things take a turn for the worse when she probably has a new stroke on 26th May (116) (303). She remains totally dependent after this.
- 2.8. She is seen by a locum consultant genatrician, Dr Ashbal on 29th May. His assessment is that she will not return to her residential home and that he is transferring her to Gosport "with a view to considering continuing care". By this he probably means an assessment as to whether this lady is dying or will improve enough to be discharged into a nursing home, or perhaps to simply remain in an NHS continuing care bed until she does die. However, this is not spelt out in the letter or the notes.
- 2.9. The medical notes make very little further comment on her clinical condition at the Queen Alexander Hospital, however, the nursing notes on the 2nd June comment she is very demanding overnight, shouting out continuously, suggesting that she is acutely delinous again and that she is so breathless that she has to sit up all night on the night of the 2nd June. I believe this lady is now physically detenorating, but it is impossible to tell if this is progression of heart failure, a pulmonary embolus, or chest infection on top of herother problems. I have little doubt that she was entering a terminal phase of her illness.
- 2.10. On the 3rd June she is transferred to Gosport War Memorial hospital where she is noted to have a buttock bedsore (22). The recorded medical assessment is brief but does include an examination, which although it notes that she has a tachycardia and is very breathless, fails to give an overall impression of her status and whether this is acute, chronic or acute on chronic and

fails to record her pulse and blood pressure. A thorough objective assessment of this lady's clinical status is not possible from the notes that are made on admission, and would appear to be below an acceptable standard of good medical practice.

- 2.11. It seems likely though that the doctor recognises that this lady was seriously ill as the only comment under the examination is "needs palliative care if necessary". There is no record in the notes of this being discussed at this stage with the nurses or the family.
- 2.12. The drug chart is written up with all the usual medication from Queen Alexander Hospital and this is given on both the 3rd and 4th June.
- 2.13. Diamorphine with Midazolam and Hyoscine are written up PRN on admission. The Midazolam is usually used for terminal restlessness and is widely used subcutaneously in doses from 5 80 mgs per 24 hours for this purpose. 20 mgs is within current guidance but at the top end for elderly patients. Elderly patients usually need a dose of between 5 20 mgs per 24 hours.
- 2.14. Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. It can be difficult to predict exactly the starting dose of Diamorphine to give in a syringe driver but many would give between 5 15 mgs of Diamorphine in the first 24 hours, in this case the 20 mgs is at the upper limit.
- 2.15. Mrs Service becomes extremely restless and agitated on the night of 4th June (probably similar to the previous night at the Queen Alexander hospital). Midazolam is now started via a syringe driver at 20 mgs. The restlessness is probably being caused by her severe breathlessness and heart disease and Diamorphine althis stage might well have been the drug of choice, but it is difficult to criticise the use of Midazolam.
- 2.16. She continues to deteriorate over night and the Midazolam is now replaced with Diamorphine 20 mgs a day and Midazolam 40 mgs. She then deteriorates further and dies 15 hours later.
- 2.17. There is no evidence in the notes that any other medical assessment was done prior to the starting of the Diamorphine and Midazolam in the syringe driver, nor is there any evidence at all that at any time after her admission to Gosport was further advice obtained from the consultant who was presumably responsible for this patient's care. It is not clear from the notes if the locum consultant (Dr Ashbal) was responsible for the patient's care once they had transferred to Gosport Hospital and it would have been good medical practice for the doctor at Gosport to have sought further advice from their consultant when a patient was transferred, apparently so seriously ill, and immediate palliative care was being

considered.

- 2.18. It is also possible to criticise the care at Queen Alexander. All to often when a patient is not obviously going home and a bed elsewhere has been found, the pressure is to move the patient at the first opportunity, even when it may not be in their best interest. It seems likely to me that her condition was deteriorating in the Queen Alexander Hospital and the stress of an ambulance transfer would not have helped this lady's care.
- 2.19. The cause of death in Mrs Service was multifactorial. In my view the dose of 20mg Diamorphine combined with the 40mg dose of Midazolam was higher than necessary in this very elderly and frail lady's terminal care and the medication may have slightly shortened life, although this opinion does not reach the standard of proof of "beyond reasonable doubt". However, I would have expected a difference of, at most, no more than a few hours to days, if a lower dose of either or both of the drugs had been used instead.