

CHAPTER ONE

Concerns Are Raised

Introduction

- 1.1 As is now well known, on 31st January 2000, Harold Fredrick Shipman was convicted of the murder of 15 patients and of forging the will of one of them. His trial was the culmination of an investigation which began in July 1998, when Mrs Angela Woodruff reported to the police that she suspected that a will had been forged in the name of her mother, Mrs Kathleen Grundy, who had been found dead on 24th June 1998. Under the will, Shipman was the sole beneficiary of Mrs Grundy's estate. Shipman fell under suspicion of forgery. Soon afterwards, Mrs Grundy's body was exhumed and morphine was found in the tissues. On 7th September 1998, Shipman was arrested and charged with the murder of Mrs Grundy and with other offences associated with the forgery of her will. The police investigation widened to include the deaths of other patients of Shipman who had died suddenly and unexpectedly. Fifteen deaths (including that of Mrs Grundy) were, in due course, selected for charge and trial. In 2001, this Inquiry embarked on the task of discovering the full extent of Shipman's criminal activities. In July 2002, I reported that he had killed at least 215 patients.
- 1.2 The investigation that began in July 1998 was not the first occasion on which the police had looked into the possibility of criminal conduct by Shipman. On 24th March 1998, Dr Linda Reynolds, a general practitioner and principal at the Brooke Practice, 20 Market Street, Hyde, reported to Mr John Pollard, HM Coroner for the Greater Manchester South District ('the Coroner'), her concerns about the number of Shipman's patients who were dying and about the circumstances of their deaths. At the request of the Coroner, a confidential investigation was carried out by the Greater Manchester Police (GMP or 'the Force'). That investigation was conducted by Detective Inspector (DI) David Smith under the supervision of Chief Superintendent (CS) David Sykes. At the end of it, DI Smith concluded that there was no substance in the doctor's concerns. He communicated his view to Dr Reynolds and to the Coroner and there the matter rested.
- 1.3 After the closure of that first investigation, Shipman killed three more patients before his arrest. They were Mrs Winifred Mellor, who died on 11th May 1998, Mrs Joan Melia, who died on 12th June 1998 and Mrs Grundy, whom he killed on 24th June 1998. Following Shipman's trial, questions arose about the thoroughness with which the earlier police investigation had been carried out and whether or not, if it had been conducted differently, Shipman's course of killing could have been stopped earlier and the lives of three of his victims saved.
- 1.4 In the course of hearings which took place between May and July 2002, the Inquiry conducted a detailed examination of the March 1998 police investigation. The Inquiry considered the parts played, not only by DI Smith and CS Sykes, but by all those who contributed to the investigation. They included the Coroner who reported Dr Reynolds' concerns to the police, the registrars who provided information about the deaths of Shipman's patients and Dr Alan Banks, Medical Adviser to the West Pennine Health Authority (WPHA or 'the Health Authority'), who examined the dead patients' medical

records. This Second Report records my findings as to what occurred during this investigation and provides my opinion as to whether or not, in performing their duties, the conduct of the various public servants involved fell below the standard which the public is entitled to expect.

The Dangers of Hindsight

- 1.5 From the outset, the Inquiry recognised the need to look at events in the light of what was known at the time. We now know that Shipman was a serial murderer who, over the course of 23 years, killed at least 215 patients. To those involved in March 1998, however, Shipman was a well-respected general practitioner with a reputation for giving his patients a high standard of care. It cannot have been easy for those involved in the first investigation to give serious consideration to the idea that Shipman might be killing his patients.
- 1.6 As the daughter of Mrs Grundy, Mrs Woodruff has particular reason to wish that the March 1998 investigation had been successful in revealing Shipman's criminality. If it had been, her mother might have been alive today. Yet, in her statement to the Inquiry, Mrs Woodruff said this:

'I ... understand extremely well from my own experience ... just how difficult it was to believe that an especially respected GP could have deliberately murdered his own healthy patients. I can also understand how difficult it would be to find any clear evidence for any wrongdoing without access to Dr Shipman's actual patient records (complete with the computer audit trail) and/or discussing the circumstances of deaths with the patients' relative [sic]. There is little doubt that such enquiries would have come to the notice of Dr Shipman himself and quite possibly the media ... Whilst I believe that it is appropriate to establish exactly what did happen in this earlier enquiry, I do feel that the events must be judged on the basis of the circumstances at the time and not with the benefit of hindsight.'

- 1.7 Mrs Woodruff is right. It would be quite unfair to criticise any person for a failure of duty if that failure were to be considered with the benefit of hindsight.

Death Registration and Cremation Certification

- 1.8 A brief explanation of the systems of death registration and cremation certification must now be given. A fuller explanation was provided in Chapter Five of the First Report.
- 1.9 When a person dies at home in circumstances that are not obviously suspicious, the usual procedure is for the general practitioner to be informed. That doctor decides whether s/he can certify the cause of death or whether the death should be reported to the coroner.
- 1.10 If the doctor is confident that s/he knows the cause of death, s/he will sign a certificate known as the Medical Certificate of Cause of Death (MCCD). MCCDs are supplied in a book rather like a large cheque book. When a doctor has completed a certificate, s/he

tears it out of the book. S/he is then left with a counterfoil in the book, on which s/he records details of the certificate s/he has completed.

- 1.11 Usually, the doctor hands the completed MCCD to the person (most frequently a relative of the deceased) who is to be responsible for registering the death. That person takes the certificate to the register office. If all is in order, the registrar will register the death. The same procedure is followed if a death occurs in hospital; the doctor signing the MCCD will, in those circumstances, usually be a hospital doctor.
- 1.12 In some circumstances laid down by statute, or if the doctor is not confident that s/he knows the cause of death, the case is reported to the coroner. Usually, there is then a full invasive examination of the internal organs (known as an autopsy or post-mortem examination), after which the coroner might issue a burial order or cremation certificate to allow disposal of the body without an inquest. Sometimes, s/he will formally open and adjourn an inquest before permitting disposal.
- 1.13 The deceased person's own doctor will sign an MCCD (or 'certify the death', as it is colloquially known) only when the deceased has died outside hospital and when the death has not been formally reported to the coroner. As a very rough guide, 60% of all deaths occur in hospital and, of the remaining 40% that occur in the community, about a quarter are reported to the coroner. So, on average, for every 100 patient deaths, a general practitioner will certify the cause of only about 30.
- 1.14 The proportion of deaths followed by cremation has increased steadily over recent years and is now about 70%. The procedure for obtaining authority to cremate a body starts with the completion of the Application for Cremation (Form A) by the person seeking the cremation, usually the deceased's nearest relative. The Certificate of Medical Attendant (Form B) must then be completed by a doctor who has attended the deceased before death and has seen and identified the body after death. For deaths out of hospital, Form B is usually completed by the general practitioner who has issued the MCCD. Because only about 70% of bodies are cremated, it follows that the general practitioner will sign fewer Forms B than MCCDs. So, for every 100 patient deaths, a general practitioner will expect to sign about 30 MCCDs and, in about 21 of those deaths, he will also sign a cremation Form B.
- 1.15 The Confirmatory Medical Certificate (Form C) must be completed by a second doctor who is neither a relative of the deceased nor a relative or partner of the Form B doctor. Form C requires the doctor completing it to have seen and **'carefully examined'** the body of the deceased and to have seen and questioned the Form B doctor about the death. The usual practice is for the first doctor (the Form B doctor) to speak to the second doctor, either face to face or by telephone, and to explain the circumstances of the death and any relevant medical history. The first doctor then either hands the completed Form B to the second doctor or leaves it at the funeral director's premises, where the second doctor goes to examine the body and complete Form C.
- 1.16 At the end of Form C, the second doctor states what s/he believes to have been the cause of death and goes on to certify that:

'... I know of no reasonable cause to suspect that the deceased died either a violent or an unnatural death or a sudden death of which the

cause is unknown or died in such place or circumstances as to require an inquest in pursuance of any Act.'

- 1.17 The relatives of the deceased pay fees to the doctors who complete Forms B and C. Forms A, B and C are then sent to the crematorium, where they are examined by a medical referee. The medical referee is a doctor, who works part-time at the crematorium and whose responsibility it is to ensure that the forms have been properly completed and that the cause of death has been '**definitely ascertained**'. If so satisfied, the medical referee signs the Authority to Cremate (Form F), which is the final step in the process of obtaining authority to cremate the body.

Shipman's Arrangements for the Signing of Cremation Forms C

- 1.18 It is not uncommon for neighbouring practices to develop reciprocal arrangements for the completion of Forms C. Shipman began to practise single-handed from his own premises at 21 Market Street, Hyde, in August 1992. His departure from the Donneybrook Practice had been acrimonious. Not long after he set up alone, a group of doctors from the Clarendon House Practice (which had shared a building with the Donneybrook Practice) moved to premises at 20 Market Street, directly opposite Shipman's surgery. Their practice became known as the Brooke Practice. Soon afterwards, an informal arrangement was made between the two practices for the provision of mutual support and assistance, as and when necessary. In particular, Dr Alastair MacGillivray, Dr Jeremy Dirckze and Dr Susan Booth regularly asked Shipman to sign cremation Forms C for their patients and Shipman would almost invariably ask the Brooke Practice doctors to sign his.
- 1.19 The Brooke Practice kept a record of the Forms C signed by the partners. That record shows that, between September 1993 and September 1998, all but five of the Forms C signed by members of the practice related to the deaths of Shipman's patients. This demonstrates that the Brooke Practice was not providing a regular service for signing Forms C to any doctor other than Shipman.

Concerns at the Brooke Practice

Dr Reynolds' Observations

- 1.20 Dr Reynolds joined the Brooke Practice on 1st September 1996. The existing partners were Dr MacGillivray, Dr Dirckze, Dr Booth and Dr Rajesh Patel. Dr Reynolds had previously been a principal in a general practice in Reddish, Stockport, for a period of 19 years. As I have already indicated, she was to play an important role in the events surrounding the first police investigation. Sadly, she died in March 2000, not long after Shipman's conviction. Before her death, she provided statements of her evidence to the police and had also written a statement for distribution to members of the press, who were anxious to interview her at a time when she was extremely ill. For her account of events, the Inquiry has relied on those written statements and also on the recollections of her widower, Mr Nigel Reynolds. It is clear that Dr Reynolds told her husband a great deal about her concerns and he has a good recollection of the events of early 1998. He was a most careful

witness and I have no hesitation in accepting his evidence, notwithstanding its hearsay nature.

- 1.21 In the months following her appointment at the Brooke Practice, Dr Reynolds began to notice that she was asked to sign a cremation Form C rather more often than she had been accustomed to do at her former practice. Also, when reading the Forms B completed by Shipman, which gave details about the circumstances of the deaths, she noticed that, on several occasions, he had been present at the death. Dr Reynolds realised that this was odd since, in her experience, the presence of a doctor at the death of a patient was unusual; it had happened to her only two or three times in 19 years of practice. Towards the end of 1997, she mentioned this apparent oddity to her partners but was assured that Shipman had a lot of elderly patients and was well known as a doctor who would visit his patients unannounced when he was concerned about their condition, so his presence at their deaths was not surprising. She remained conscious of the frequency with which she was asked to complete a Form C for Shipman and still felt it was unusual for a general practitioner to be present at a patient's death.
- 1.22 None of the other Brooke Practice doctors had observed anything odd about the circumstances of the deaths of Shipman's patients. Dr Patel had noticed that Shipman had been present at the time of at least one of the deaths for which he was asked to sign a Form C. Dr Patel raised this with Shipman, who replied that younger doctors these days did not visit their patients in the same way that old-fashioned doctors like himself did. He said that he tried to keep his patients at home to allow them to die with dignity rather than allow them to have an 'undignified end' in the hustle and bustle of an unfriendly hospital. He put Dr Patel firmly in his place, implying that the old ways were best and that doctors who visited at home were providing a better standard of care for their patients than their younger colleagues. Dr Patel accepted Shipman's explanation.

Mrs Bambroffe Voices her Concerns

- 1.23 On 23rd February 1998, Dr Booth visited the premises of Frank Massey and Son, Funeral Directors (Masseys), to complete a Form C in respect of Miss Maureen Ward. On that occasion, Mrs Deborah Bambroffe (nee Massey), who worked in the family business together with her father, Mr Alan Massey, and her husband, Mr David Bambroffe, told Dr Booth that she was concerned about the number of deaths among Shipman's patients, compared with those among the patients of other doctors. According to Dr Booth, Mrs Bambroffe also said that she was concerned about some unusual features of the deaths; the worrying deaths were of elderly women who had died at home, apparently alone, and had been found sitting up in a chair, fully dressed. They did not appear to have been ill. This was unusual, in Mrs Bambroffe's experience. She was more accustomed to finding that the death had occurred while the person was in bed and surrounded by the paraphernalia of illness. Usually in such cases, a relative or friend was present. In cases of sudden death, Mrs Bambroffe was accustomed to seeing the deceased person on the floor or showing some other sign of a sudden collapse. Mrs Bambroffe had also noticed that Shipman often seemed to be present at or shortly after the death; she had sometimes wondered how he had gained access to the premises. Mrs Bambroffe wanted to discuss

her concerns with one of the Brooke Practice doctors but was afraid that her concerns would not be taken seriously. She chose Dr Booth as the most approachable.

- 1.24 Dr Booth promised Mrs Bambroffe that she would discuss her concerns with the other members of the Brooke Practice. As soon as Dr Booth returned to the surgery, she told Dr Patel about her conversation with Mrs Bambroffe. They decided that they would discuss what Dr Booth had been told with the other partners. Whether they did so immediately is not clear. Dr Reynolds was away on holiday at the time. It seems likely that the matter was mentioned to Dr MacGillivray and Dr Dirckze. A few days later, Dr MacGillivray attended at Masseys' premises and spoke to Mr Massey, who was aware that his daughter, Mrs Bambroffe, was worried about the deaths of some of Shipman's patients. Dr MacGillivray had known Shipman for a very long time and held him in high regard. He believed that Shipman liked to keep his elderly patients at home, rather than have them admitted to hospital. He also believed that Shipman had a large number of elderly patients on his list. To him, there seemed to be a perfectly rational explanation for the large number of Shipman's elderly female patients who, as Mrs Bambroffe had observed, died in their own homes. Dr MacGillivray gave Mr Massey his opinion about Shipman and Mr Massey passed it on to his daughter, who felt reassured to some extent.

Dr Reynolds and Dr Booth Speak

- 1.25 At about this time, Dr Reynolds began to feel increased concern about the frequency with which she was asked to complete a Form C for Shipman. She mentioned her concerns to Dr Booth. Dr Booth told her that Mrs Bambroffe had spoken of her similar concerns. According to both Dr Booth and Dr Reynolds, they visited Mrs Bambroffe and discussed their joint concerns. Mrs Bambroffe has no recollection of this meeting. Dr Booth says that, on this occasion, Mrs Bambroffe repeated to Dr Reynolds much of what she had previously said to Dr Booth. The two doctors agreed that the circumstances described by Mrs Bambroffe were unusual and worrying. Mr Reynolds also recalled his wife telling him of this meeting. Mr Massey (who, if the meeting took place, was not present) thinks that such a meeting occurred, as he recalls hearing about it. There is no doubt that such a meeting took place. However, I am uncertain whether it occurred at this stage of events, as the doctors recall. The issue is not of great importance. I am satisfied that, at some stage, Dr Reynolds learned of Mrs Bambroffe's concerns and shared the view that the circumstances in which Mrs Bambroffe had seen the bodies of Shipman's patients were unusual and worrying. Combined with her own observations about the frequency of deaths among Shipman's patients and of his presence at or around the time of death, Mrs Bambroffe's concerns served to heighten those of Dr Reynolds.

The Practice Meeting

- 1.26 As a result of the discussions between themselves (with or without Mrs Bambroffe), Dr Reynolds and Dr Booth decided that they must discuss their concerns with their partners. A practice meeting took place in a public house in Heaton Moor, near Stockport, and was attended by all the partners save Dr MacGillivray.
- 1.27 When they first gave statements to the Inquiry, the doctors believed that this meeting probably took place in the week beginning 9th March 1998. Eventually, they suggested

that it must have taken place in the following week. Also, the doctors recalled that, at that meeting, they were able to compare the number of Forms C that they had signed for Shipman during the previous year or so with the number of their own patients for whom they had completed MCCDs during that period. I accept that the meeting probably took place during the week beginning 16th March but, for reasons that will become apparent, I do not think that the comparative figures were then available.

- 1.28 It appears to me that an important factor in raising the level of Dr Reynolds' concern was Shipman's request that she should sign a cremation Form C in respect of Mrs Lily Higgins, who died on Tuesday, 17th March 1998. [My decision in respect of her death is in Volume Four of my First Report. I found that Shipman had killed her.] Dr Reynolds signed the Form C on Thursday, 19th March. I am satisfied that, having signed that form, Dr Reynolds was worried about whether she should have done so. Mr Reynolds recalled a time at which his wife became extremely worried about the Shipman situation and said that they talked 'round and round' the topic. Dr Reynolds was wondering what she ought to do. Mr Reynolds said that he asked her whether she really thought it possible that Shipman might be killing his patients. At first, she replied, 'No', then, after a few moments, she said, 'No, I know he is killing his patients.' I think this conversation probably took place soon after Dr Reynolds had signed Mrs Higgins' Form C. I think it spurred Dr Reynolds into action and that the practice meeting followed shortly afterwards. I think it likely that the practice meeting took place on either Thursday, 19th March or Friday, 20th March. However, the date is not crucial.
- 1.29 At the meeting, the Brooke Practice doctors discussed the concerns about the number of Shipman's elderly patients who had died in recent months. They were also concerned about the common features that Mrs Bambroffe had noticed. Although all the doctors present were concerned to some degree, some were less so. Some thought that Shipman had a large list with many elderly patients and so could be expected to have more patient deaths. It was pointed out that he favoured nursing patients at home rather than admitting them to hospital. However, there was also a discussion about the possibility that Shipman might be killing patients, either intentionally or unintentionally by negligence. The doctors debated what, if anything, they should do about their concerns. Dr Reynolds was the most seriously worried of the four. She was able to draw on her previous experience in another practice. She had a strong feeling that something was wrong and was anxious to take some action. Eventually, it was agreed that Dr Reynolds would communicate the concerns of members of the practice to the coroner, having first sought advice from the Medical Defence Union (MDU).

Dr Reynolds Takes Action

Discussions with Mrs Bambroffe

- 1.30 Telephone records show that, on Sunday, 22nd March, Dr Reynolds telephoned Masseys' premises. I think it likely that she wanted to speak to Mr Massey about her concerns over Shipman and to tell him that she had decided to make a report. Mr Massey was not available, as he was away on holiday. The call lasted only 26 seconds. Mrs Bambroffe remembers taking the call. She told Dr Reynolds that her father was away. On thinking

about the call afterwards, she realised that Dr Reynolds had probably telephoned in connection with Shipman. Consequently, two days later, Mrs Bambroffe telephoned Dr Reynolds to ask why she had wanted to speak to Mr Massey. I shall return to that telephone call in Chapter Three.

Discussions with the Medical Defence Union

- 1.31 On Monday, 23rd March, Dr Reynolds telephoned the MDU advice line and spoke to Dr Susan Gough, who was then a medico-legal adviser to the MDU. Dr Gough's contemporaneous note records that Dr Reynolds told her that all five doctors at the Brooke Practice were concerned at the **'apparently large'** number of deaths among elderly patients in Shipman's practice and that a local undertaker had discussed her concerns with one of the doctors. I note, in passing, that that would suggest that Dr Reynolds had not at that time spoken to Mrs Bambroffe. Dr Reynolds mentioned to Dr Gough that she was concerned that she had recently signed a further Form C for a patient of Shipman's (which must have been that for Mrs Higgins). Dr Gough gained the impression that Dr Reynolds had decided she must take some action and wanted advice as to whether she should report her concerns to the coroner or to the police. I observe that Dr Gough did not note that Dr Reynolds told her of the comparative figures for the deaths certified in the Brooke Practice and the numbers of Forms C signed for Shipman. That suggests to me that Dr Reynolds was not then in possession of the figures. I say that because, once she was aware of them, the evidence is that they were uppermost in her mind. That is why I doubt the doctors' recollection that the comparative numbers were discussed at the practice meeting, which, as I have explained, took place before the conversation with Dr Gough.
- 1.32 Dr Gough decided to consult with a more senior colleague at the MDU. She agreed to speak to Dr Reynolds later that day and asked that, in the meantime, Dr Reynolds should find out the name of the medical referee at the local crematorium and discover when the funeral/cremation of the recently deceased patient was to take place.
- 1.33 Dr Gough and Dr Reynolds spoke by telephone again in the late afternoon of the same day. Dr Gough's note records that, in the interim, Dr Reynolds had had a discussion with a local undertaker. From the context, this must have been with Mrs Bambroffe. There is no record of a telephone call from the Brooke Practice Surgery to Masseys' premises and Mrs Bambroffe does not recall meeting Dr Reynolds on that day. However, it is possible that the meeting was in person. I have considered whether, notwithstanding the recollections of those concerned to the contrary, the meeting between Dr Booth, Dr Reynolds and Mrs Bambroffe, described as having occurred some time earlier, in fact took place on that day.
- 1.34 According to Dr Gough's note, it appeared that the undertaker's concerns were that the deceased patients were all women and had died without any history of previous illness. They were often found dead by the doctor, not long after he had paid them a visit at home **'of his own volition'**. They were found fully clothed. This is plainly a description of Mrs Bambroffe's concerns. Dr Gough's note also refers to the fact that most of the bodies had a grey coloration. In evidence, Mrs Bambroffe agreed that she might have mentioned

that to the doctors but said that it had not been a cause for concern. Mrs Bambroffe must have been the undertaker referred to in Dr Gough's note. I think it likely that the only meeting between the three women took place on that day. Dr Gough also noted that Dr Reynolds had discovered that Mrs Higgins' funeral was to be held on 26th March. In fact, it was to take place on 25th March and a mistake must have been made by Dr Gough, Dr Reynolds or the funeral director of whom enquiry was made. Again, there is no reference to the comparative figures in this second note. I infer that Dr Reynolds still did not have them. If she had, I am sure she would have mentioned them to Dr Gough.

The Comparative Figures

- 1.35 Dr Reynolds must have resolved to speak to the Coroner on the following day. By the time she spoke to him, she was certainly in possession of the comparative figures. In my view, it is probable that the figures were extracted from the surgery records in the late afternoon or early evening of 23rd March. I think it is likely that Dr Dirckze examined the records to ascertain how many Forms C the Brooke Practice doctors had signed for Shipman in the previous months and how many MCCDs they had signed in the same period. However, although Dr Dirckze agrees he carried out this exercise, he does not believe that he would have had time to do it on that Monday. He cannot recall exactly how he obtained the information about the Brooke Practice patients. He believes he might have used the surgery computer. I think it likely that Dr Dirckze decided to extract the comparative figures because, on that Monday, 23rd March, Shipman asked him to sign a Form C for Miss Ada Warburton, who had died on 20th March. [My decision about her death is in Volume Six of my First Report. I found that Shipman killed her.] This request to sign a Form C would have raised his own level of concern and alerted him to the availability of the comparative figures. It is possible that Dr Reynolds also looked at the figures. Certainly, she made a note of them. Long after her death, her husband found a note, written in her hand, which appears to be an *aide memoire* to assist Dr Reynolds in her conversation with the Coroner. It contains what seems to be a note of the number of deaths of patients at the Brooke Practice and the number of cremation Forms C signed for Shipman during the previous three months. It also contains a reference to the death of Miss Warburton and a brief description of some of the features of the deaths that had given rise to Mrs Bambroffe's concerns.
- 1.36 The figures showed that the Brooke Practice doctors had signed 16 Forms C for Shipman in the previous three months, including the Form C for Miss Warburton, completed that day. That number would not include any patients of Shipman who had died in hospital or who had been buried or whose cause of death had been certified by the coroner. The Brooke Practice doctors could not accurately estimate the total number of deaths among Shipman's patients in that period but realised that, if his practice followed the usual pattern, it was likely to be much higher than 16. The note showed that either 14 or 15 patients of the Brooke Practice had died in that three-month period. Dr Reynolds had changed the number written in her note from 14 to 15. This number included deaths that had occurred both in hospital and in the community, not just deaths where the Brooke Practice doctors had completed the MCCD. Over the previous year, the Brooke Practice doctors had completed 16 MCCDs. The Brooke Practice, with five doctors, had a list of

about 9500 patients. The Brooke Practice doctors did not know the size of Shipman's list but they knew that he practised alone. They thought he might have about 3000 patients. Taking these figures together, it would appear that the death rate among Shipman's patients was very much higher than that for the Brooke Practice. At the very least, it appeared to be about three times the Brooke Practice rate and some of the doctors, including Dr Dirckze, considered that the death rate for Shipman's practice might be as much as eight or nine times higher than that of the Brooke Practice. Now that the comparative figures were available to Dr Reynolds, they were, as will be seen, in the forefront of her mind.