Witness Statement Ref. No. 284/1

NAME OF CHILD: RAYCHEL FERGUSON (LUCY CRAWFORD)

Name: Dara O'Donoghue

Title: Doctor

Present position and institution:

Consultant Paediatrician/ Clinical Academic Teaching Fellow in the Royal Belfast Hospital for Sick Children and the Queens University of Belfast

Previous position and institution:
[As at the time of the child's death]

Senior House Officer (Acting Registrar) in Paediatrics in the Paediatric Intensive Care Unit (PICU) in the Royal Belfast Hospital for Sick Children (RBHSC).

Membership of Advisory Panels and Committees:
[Identify by date and title all of those between January 2000 – August 2012]

Deputy Chairman Royal Belfast Hospital for Sick Children Drugs and Therapeutics Committee January 2010-present.
Member of Belfast Trust Drugs and Therapeutics Committee January 2010-present
Deputy Chairman of fourth year Learning and Teaching Committee Queens University Belfast June 2010- present.

Previous Statements, Depositions and Reports:
[Identify by date and title all those made in relation to the child's death]

Medical Certificate of Cause of Death of Lucy Crawford 04/05/2000
2 statements to PSNI 04/03/05.

OFFICIAL USE:
List of previous statements, depositions and reports:

Ref:	Date:	
	4/5/2000	Medical Certificate of Cause of Death of Lucy Crawford
	4/3/2005	1st Statement to PSNI
	4/3/2005	2nd Statement to PSNI

IMPORTANT INSTRUCTIONS FOR ANSWERING:

Please attach additional sheets if more space is required. Please identify clearly any document to which you refer or rely upon for your answer. If the document has an Inquiry reference number, e.g. Ref: 049-001-001 which is 'Chart No.1 Old Notes', then please provide that number.

If the document does not have an Inquiry reference number, then please provide a copy of the document attached to your statement.

I. QUERIES IN RELATION TO YOUR MEDICAL QUALIFICATIONS, EXPERIENCE, TRAINING AND RESPONSIBILITIES

(1) Please provide the following information:

(a) State your medical qualifications as of the 4th May 2000.

MB BCH MRCP DCH.

(b) State the date you qualified as a medical doctor.

December 16th 1993

(c) Describe your career history before you were appointed to the Royal Belfast Hospital for Sick Children (RBHSC).

Junior House Officer (JHO) year in the Mater Hospital Feb 1994- Feb 1995

Senior House Officer (SHO) post in Geriatrics in Whiteabbey Hospital Feb 1995-August 1995

SHO post in General Medicine August 1995- Feb 1996

SHO post in Haematology Royal Victoria Hospital Feb 1996-August 1996

SHO in Paediatrics In Ulster Hospital Dundonald August 1996-Feb 1997

SHO in Accident and Emergency Ulster Hospital Dundonald Feb 1997-August 1997

SHO Paediatrics Antrim Area Hospital August 1997 –August 1998

SHO Paediatrics Daisy Hill Hospital August 1998- Feb 1999

SHO Neonatology Royal Maternity Hospital Feb 1999- August 1999.

(d) Describe your work commitmernts to the RBHSC from the date of your appointment, stating the locations in which you worked and the periods of time in each department/location.

August 1999 - November 1999: SHO in Ambulatory Paediatrics. I worked in outpatient clinics in General paediatrics and Community Paediatric asthma clinics. I did 'on-call' work in the Paediatric Intensive Care Unit (PICU).

November 1999- February 2000: SHO in Paediatric Cardiology. I did ward work in the Paediatric Cardiology ward (Clark clinic) as well as working in Paediatric Cardiology outpatient clinics under the direction of the Paediatric Cardiologists. I did 'on-call' work in the PICU.

February 2000- August 2001 SHO (Acting Registrar) in Paediatric Intensive Care Unit): My work commitments included doing ward rounds with the Consultants, writing in medical notes, writing up medications in the medication record, taking blood samples, arranging investigations and liasing with other specialities. I did 'on-call' work in the PICU.

(e) Describe your duties in the RBHSC on

(i) 14th April 2000 and

I cannot recall my specific duties on 14th April but I believe they would have been as in (d).

(ii) 4th May 2000.

I cannot recall my specific duties on 14th April but I believe they would have been as in (d).

(f) How much experience did you have of completing Medical Certificates of Cause of Death (MCDDs) by 4 May 2000?

I am unable to recall exactly how many MCCDs that I had completed by that date but I had completed a number of death certificates by 4 May 2000

(2) Provide full details of any advice, training or instruction which was provided to you in order inform you about any of the following matters

- **Hyponatraemia**

I am unable to recall receiving any specific advice, training or instruction on hyponatraemia

- **In the treatment of a child suffering from dehydration due to gastroenteritis**

I had received clinical instruction as a Senior House Officer in the treatment of dehydration due to gastroenteritis during my clinical attachments but i am unable to recall the exact dates that I received this instruction. I received instruction in fluid resuscitation in an Acute Paediatric Life Support course in Belfast in May 1998

- **The completion of MCDDs**

I am unable to recall receiving any advice, training or instruction on the completion of MCCDs.

And address the following-

(a) Who provided this advice, training or instruction to you?

(b) When was it provided?

(c) What form did it take?

(d) What information were you given?

(3) **At any time prior to April 2000 had you received any form of advice, training or education in order to inform you of the issues relating to hyponatraemia in paediatric cases and if so please state :**

(a) Who provided this advice, training or education to you?

(b) When was it provided?

(c) What form did it take?

(d) Generally, what issues were covered and what information were you given?

I am unable to recall receiving any form of advice, training or education on issues relating to hyponatraemia in paediatric cases.

(4) **Decribe in detail your experience, prior to April 2000, of dealing with children with hyponatraemia including :**

(a) Estimated numbers of such cases;

(b) Nature of your involvement;

I estimate that I would have had experience of dealing with 5-10 children with hyponatraemia. My involvement would have been as a Senior House working under Consultants, Senior Registrars, Registrars and Staff Grade Paediatricians in treating children with hyponatraemia.

Most of the cases would have been where children had hyponatraemia secondary to gastroenteritis or chest disease. I would have taken medical histories, performed clinical examinations, performed appropriate investigations and commenced treatment under the guidance of more senior clinicians.

(c) Outcome of the cases.

My recollection is that all of the children that I was involved with treating made a full recovery.

(5) **Describe in detail your experience since April 2000, of dealing with children with hyponatraemia, including:**

(a) Estimated numbers of such cases;

(b) **Nature of your involvement;**

I estmate that I have been involved in dealing with approximately 50 children with hyponatraemia since April 2000 as a Senior House Officer, Clinical Fellow in Paediatric Intensive Care , Specialist Registrar and as a Consultant in the care of children with Hyponatraemia. My involvement has been in the diagnosis and treatment of children hospitalised with a condition that has led to hyponatraemia.

(c) **Outcome of the cases.**

I was the clinical Fellow in PICU in 2001 when a child was transferred from Altnagelvin Hospital who subsequently died. To the best of my knowledge the other children that I was involved in treating made a full recovery.

II. QUERIES ARISING FROM AN ENTRY IN THE CLINICAL NOTES DATED 4 MAY 2000 [Ref: 061-018-068]

(6) **Please confirm that the entry in the clinical notes dated 4 May 2000 [Ref: 061-018-068] was made by you.**

This entry was made by myself.

(7) *"Contacted by -re death certificate"*

By whom were you contacted regarding a death certificate for Lucy?

I am unable to recall specifically who contacted PICU and whom I spoke with but i believe that it was a family representative of Lucy Crawford.

(8) *"spoke to Dr Stewart-had been waiting for pm result"*

Provide full details of your discussion with Dr Stewart.

I am unable to recall the details of the discussion with Dr Stewart. The notes suggest that I spoke with Dr Stewart (Registrar) to get her advice as the death certificate had not been completed. I was aware that Dr Stewart was a member of the Paediatric Neurology team involved in treating Lucy and this is why i contacted her.

(9) *"pm result in front of chart"*

(a) **Identify the document or documents referred to as *"pm result"*.**

I believe that this refers to the post-mortem report

(b) Insofar as you are aware, when was the "pm result" received by RBHSC?

I am not aware of when the post-mortem report was received by RBHSC

(10) *"spoke to Dr Hanrahan -cause of death 1.cerebral oedema 2.dehydration 3. gastroenteritis"*

Provide full details of your discussion with Dr Hanrahan.

I am unable to recall specific details of the discussion with Dr Hanrahan but I contacted Dr Hanrahan to advise on completion of the death certificate. I would have informed him that a representative of Lucy's family had contacted PICU regarding the death certificate and, as he was the Consultant who had been caring for Lucy, asked for his advice. The notes indicate that he advised me the causes of death for the MCCD should be 1. Cerebral Oedema 2. Dehydration and 3. Gastroenteritis. I believe that Dr Hanrahan asked me if I would complete the MCCD and I believe that I agreed to do this.

III. QUERIES ARISING FROM THE MCCD FOR LUCY CRAWFORD DATED 4 MAY 2000 [Ref: 013-008-022]

(11) Please confirm that the MCCD for Lucy [Ref: 013-008-022] was completed and signed by you.

The MCCD for Lucy was completed and signed by me.

(12) Why did you (rather than the consultant in charge of Lucy's care) complete and sign the MCCD in respect of Lucy's death?

I was a registered doctor working in the PICU and I was aware as such that I was able to complete MCCDs. I would not have done so without instruction from the Consultant in charge of the case and that is why I contacted the Consultant.

(13) Do you consider that you were an appropriate person to complete and sign the MCCD in respect of Lucy's death? If so please give your reasons.

I do consider that I was an appropriate person to complete and sign the MCCD as I was a registered medical doctor, was working in PICU, had been a member of the team treating Lucy and did so under instruction from the Consultant in charge of the case.

(14) In relation to the statement that you last saw Lucy alive and treated her on the 14th April 2000, detail the occasion(s) on which you saw Lucy and the treatment you personally provided-

(a) On 14 April 2000

I am unable to recall the exact times that I saw Lucy and the treatment that I personally provided on 14th April 2000 but it is likely that I would have been on the ward round that would have included making a plan of care for Lucy on the morning of 14th April.

(b) Prior to that date.

I am unable to recall the exact times that I saw Lucy prior to 14th April. The medicine record and fluid prescription chart indicate that i prescribed DDAVP and intravenous fluids for Lucy on 13 April 2000.

(15) In relation to the statement that you saw Lucy after death state when and where you saw her.

I am unable to recall the exact times that I saw Lucy after death. I believe that i would have seen her in the PICU shortly after her death.

(16) In relation to the certified cause of death -

(a) Detail, with reference to Lucy's medical records and reports, or other information available to you, the factors that led you to determine cause of death as 1(a) cerebral oedema (b) dehydration (c) gastroenteritis.

I am unable to recall the factors that led me to determine the cause of death as 1. Cerebral oedema 2. Dehydration. 3. Gastroenteritis. It is likely that I was aware from the medical notes that Lucy had presented with probable gastroenteritis, was felt to be clinically dehydrated , had received intravenous fluids, and had seizures. It is also likely that from reading the post-mortem report that I was aware the report concluded that Lucy had cerebral oedema and bronchopneumonia. I sought and received guidance from the Consultant regarding causes of death and recorded the causes of death as advised by my senior colleague.

(b) In particular, please describe in detail-

(i) What consideration you gave to the possible causes of the cerebral oedema.

I am unable to recall what consideration I gave to the possible causes of cerebral oedema

(ii) The factors which led you to conclude that cerebral oedema was due to, or in consequence of, dehydration.

I am unable to recall all the factors that led me to conclude that cerebral oedema was due to or in consequence of dehydration. It is likely that i was aware that Lucy had initially been admitted to the Erne hospital with a diagnosis of gastroenteritis, was felt to be dehydrated, had received fluid resuscitation and developed cerebral oedema. The notes indicate that, as a junior member of the paediatric team in PICU, I sought advice from the consultant in charge and was advised that the cerebral oedema was due to or in consequence of dehydration.

(iii) How, in your view, dehydration would have caused the cerebral oedema.

I feel that cerebral oedema would have resulted from inappropriate fluid administration to treat dehydration that resulted from gastroenteritis.

(c) Did you consider whether cerebral oedema could have been due to or in consequence of any other or additional condition or event? If so-

(i) What other or additional conditions or events did you consider?

I am unable to recall if I considered and to what extent I considered whether cerebral oedema could have been due to or in consequence of any other or additional condition.

(ii) How did you exclude them and why?

I am unable to recall how and why i excluded any other conditions.

(d) Do you continue to hold the view that Lucy suffered a cerebral oedema due to or in consequence of dehydration?

No

(e) Did you have regard to the notes and records of Lucy's treatment at the Erne Hospital when you were considering the cause of death? If so, how did these inform your conclusions as to cause of death. If you did not have regard to them, explain why you did not.

I do not recall if I had regard to the notes and records of Lucy's treatment at the Erne Hospital when I was considering the cause of death.

(f) **Did you have regard to the outcome or findings of the hospital post mortem when you were considering the cause of death? If so:**

(i) **State what information, if any, you had on the 4th May 2000, regarding the outcome or findings of the hospital post mortem.**

I do not recall what information I had on the 4th May 2000 regarding the outcome or findings of the post-mortem. I recorded that the post mortem report was in the front flap of the medical notes so it is likely that I had regard to it.

In so far as such information was in writing identify the document(s) concerned.

It is likely that I had regard to the post mortem report as I recorded that it was in the front flap of the notes.

(ii) **In so far as such information was verbal, provide full details of the information, and state from whom and when you obtained it.**

I do not recall what verbal information, if any, I received regarding the outcome of the post-mortem on 4th May 2000.

(iii) **How did the outcome or findings of the hospital post mortem inform your conclusions as to cause of death?**

I cannot recall how the outcome or findings of the hospital post mortem informed my conclusions as to the cause of death.

If you did not have regard to the outcome or findings of the hospital post mortem please explain why you did not.

I cannot recall specifically if I had regard to the findings of the hospital post mortem but it is likely that I did as I recorded that the 'pm report' was in the front flap of the notes.

(g) **Did you have regard to the clinical diagnosis by Doctor Caroline Stewart of *"dehydration and hyponatraemia, Cerebral oedema → acute coning + brain stem death"* (Ref: 061-022-073), when considering cause of death? If so-**

(i) How did this inform your conclusions as to cause of death.

I am unable to recall if I had regard to the clinical diagnosis by Dr Stewart when considering the cause of death. I am unable to recall how this informed my conclusions as to the cause of death.

(ii) How and why did you exclude hyponatraemia as a cause of death?

It is likely that i was aware of Lucy having hyponatraemia as well as a number of diagnoses but likely was unaware whether this should be recorded on the death certificate so sought advice on completion of the death certificate from the consultant in charge.

(iii) Did you consider what had caused the hyponatraemia?

I am unable to recall exactly what consideration I had given to the cause of the hyponatraemia.

If you did not have regard to it, please explain why you did not.

(h) **Did you have regard to the list of *"CLINICAL PROBLEMS IN ORDER OF IMPORTANCE"*(061-022-075) listing *"(1) vomiting and diarrhoea (2)dehydration (3)hyponatraemia (4) seizure and unresponsiveness leading to brain stem death"* when considering cause of death? If so-**

I am unable to recall if I had regard to the list of 'clinical problems in order of importance'.

(i) How did this inform your conclusions as to cause of death?

I am unable to recall how this might have informed my conclusions as to the cause of death.

(ii) How and why did you exclude hyponatraemia when considering cause of death?

It is likely that i was aware of Lucy having hyponatraemia as well as a number of other diagnoses but likely was unaware whether this should be recorded on the MCCD so sought advice on completion of the MCCD from the consultant in charge.

If you did not have regard to it, please explain why you did not.

(17) Why was there a delay in the completion of the MCCD in respect of Lucy between 14 April 2000 and 4 May 2000?

I do not know why there was a delay in the completion of the MCCD between 14 April 2000 and 4 May 2000 but communication with the Paediatric Neurology team suggested that they were waiting for the post mortem report to clarify the cause of death and this may have been the reason for the delay.

(18) Why was the MCCD completed after (rather than before) the post mortem?

I do not know why the MCCD was completed after rather than before the post mortem. Communication with the Paediatric Neurology team suggested that they were waiting for the post mortem report before completing the MCCD.

(19) Did you at any time inform the Coroner's Office –

(a) That an MCCD had been issued;

I did not inform the coroner that an MCCD had been issued.

(b) What the cause of death was in the MCCD?

I did not inform the coroner what the cause of death was in the MCCD.

IV. QUESTIONS ARISING FROM YOUR STATEMENT TO THE PSNI DATED 4th MARCH 2005 [Ref: 115-036]

(20) *"On the morning of 13th April 2000, I accompanied Dr Crean on the morning PICU ward round. This usually commenced at approximately 9.15 and would last 1-2 hours. This would*

have involved Dr Crean, an SHO, a nurse and myself. There would usually have been 6 patients in PICU at any given time. I believe that that particular morning would have been no different. I note, upon checking the clinical notes that there is a typed entry signed by Dr Crean, which would have been dictated by him at the time of the ward round,

"Eighteen -month old girl, transferred from the Erne Hospital this morning.....I am awaiting faxes of her notes from the Erne Hospital and she is to be reviewed by a Paediatric Nuerologist this morning""[Ref: 115-036-002]

(a) Please confirm when the faxes of the Erne Hospital notes were received in RBHSC.

I do not know when the faxes of the Erne Hospital notes were received in RBHSC.

(b) Did you review the notes from the Erne Hospital? If so-

(i) When did you do so?

It is likely that I did review the notes from the Erne Hopital, I am unable to recall when I did so

(ii) What conclusions did you reach?

I am unable to recall what conclusions that I reached.

(c) Were you involved in any discussions with any of your colleagues about the notes from the Erne Hospital or the treatment which Lucy received at the Erne Hospital?

I am unable to recall if I was involved in any discussions with any colleagues about notes from the Erne Hospital or the treatment that Lucy received at the Erne hospital.

(d) If the answer to (c) is yes-

(i) State when the discussion occurred.

(ii) Describe the discussion.

(iii) Identify the other participants.

(iv) Describe your contribution to the discussion.

(v) Describe the outcome of the discussion.

(21) *"I consulted with Dr Stewart and Dr Hanrahan in order to facilitate this. I contacted Dr Stewart (Dr Hanrahan's Registrar) as she had written the most recent notes in the chart. I then spoke with Dr Hanrahan. Having spoken with Dr Hanrahan, I completed the Death Certificate for Lucy Crawford. Such consultation would have been standard practice in order to ascertain the cause or causes of death from the Consultant. In this instance I spoke with Dr Hanrahan. He provided the causes of death which I duly recorded in the Death Certificate. I considered these to be accurate* **[Ref: 115-036-002/3]**

(a) Confirm that the consultation with Dr Stewart referred to above is the same conversation as that which is the subject of question 8. If not, provide full details of the consultation.

The consultation with Dr Stewart is the same conversation as that which is the subject of question 8.

(b) Confirm that the consultation with Dr Hanrahan referred to above is the same conversation as that which is the subject of question 10. If not, provide full details of this consultation.

The consultation with Dr Hanrahan is the same conversation as that which is the subject of question 10.

(c) Did you discuss with Dr Hanrahan or Dr Stewart who should complete the MCCD? If so, provide details of that discussion.

I cannot recall if I discussed with Dr Stewart who should complete the death certificate. I cannot specifically recall but I think it was very likely that Dr Hanrahan asked if I would complete the death certificate as I would not have completed it without being asked to by a Consultant.

(d) Did you discuss the cause of Lucy's death with any other person? If so, identify the person(s) with whom you discussed it, and provide full details of the discussion.

I cannot recall if I discussed Lucy's death with any other person.

(e) What is the *"standard practice"* to which you refer. In particular

(i) Is it documented?

As far as I am aware it is not documented

(ii) How did you become aware of it?

I became aware of it from working in the Paediatric Intensive Care Unit.

(iii) Provide full details of the *"standard practice"*.

The standard practice was that MCCDs were completed by a registered medical practitioner usually a Consultant or a junior doctor under instruction from a Consultant.

(f) What steps did you take to satisfy yourself that the causes of death provided by Dr Hanrahan were accurate?

I cannot recall the steps that I took to satisfy myself that the causes of death provided by Dr Hanrahan were accurate.

(22) *"A number of my senior colleagues had been involved in the treatment and care of Lucy Crawford at the RBHSC, and I was not aware of them having concerns as to the cause or causes of death."*

(a) Were you involved in any discussions with your colleagues apart from those detailed in previous answers above concerning-

(i) The cause or causes of Lucy's death; or

I am unable to recall if I was involved in any discussions with colleagues regarding concerns as to the cause or causes of death.

(ii) The lessons (if any) to be learned from it.

I cannot recall being involved in discussions with colleagues about the lessons to be learned.

(b) If the answer to (a) is yes-

(i) Describe the discussion you participated in;

(ii) Identify the other participants;

(iii) Describe your contribution to the discussion;

(iv) Describe the outcome of the discussion.

V. GENERAL

(23) Did you give any consideration, at any time, to reporting the death of Lucy Crawford to the Coroner's Office?

I cannot recall if I gave consideration to reporting Lucy Crawford's death to the Coroner. It is likely that I was aware that the Coroner's office had already been contacted.

(24) Please provide any further points and/or comments that you wish to make, together with any documents in relation to:

(a) The steps taken by RBHSC to ascertain the cause of Lucy's death.

I have no further points to add on the steps taken by the RBHSC to determine the cause of Lucy's death.

(b) The steps taken to learn lessons from her death.

As a result of this medical case and others there has is much greater awareness of the issues around fluid prescribing for children. As a co-ordinator of the Healthcare of Children course in Queens University Belfast I ensure that all 4th year medical students complete the British Medical Journal online fluid prescribing module 'Reducing the risk of hyponatraemia when administering intravenous fluids to children'.

Any other matter which you consider to be relevant.

THIS STATEMENT IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Signed: Sarah Knoghue **Dated:** 7/11/12