Witness Statement Ref. No.	056/1

NAME OF CHILD: Raychel Ferguson

Name: E Millar

Title: Sister Ward 6 Altnagelvin Hospital

Present position and institution:
RSCN Jan 71 Registered Sick Children Nurse
S/N RBHSC Jan 71 – Sept 74
Wd SR RBHSC Sept 74 – Aug 76
S/N Altnagelvin Hospital Sept 76 – Jan 78
S/N Altnagelvin Hospital Aug 79 – Oct 85
Acting SR Altnagelvin Hospital Oct 85 – July 86
Ward Sr Altnagelvin Hospital July 86 – present

Training

Health Service Financial Management Sept 94
Absenteeism and Grievance Procedures Dec 95
N.I Children Order Oct 95
Children and Cancer March 96
Looked after Children N.I May 97
Collaboration in Care (Combined Child Health) May 97
Guardian Act Litem Jan 98
International Paed Nursing Conference Sept 98
'Harrassment' Training Seminar Nov 99
Paed Update (Ulster Paed Society) March 2000
'Leadership Skills'June 2000
Childhood Cancer March 2000
Leading An Empowered Organisation July 2000
Complaints Handling April 2000
Human Rights of the child Sept 2000
Audit Quality and Research Sept 2001
Clinical Governance ('Best Practice Care') June 2001
Managing Risk In Child Protection Sept 2001
Paediatric Home Ventilation Oct 2002
Legal Issues In Paed Nursing May 2003
Child Bereavement Trust Training Oct 2003
Legal Issues in Paed Nursing May 2003
Child Protection Training Nov 2003
Working with Bereaved Families May 2004
Clinical Risk Management in Paeds and Child Health Oct 2004
Knowledge Skills Framework Training June 2005

056

Previous position and institution: *[As at the time of the child's death]* Ward Sr Altnagelvin Hospital July 86 – present
Membership of Advisory Panels and Committees: *[Identify by date and title all of those between January 1995-December 2004]* Trust Representative to N.I Regional Senior Nurse Forum on Child Protection School Governor on Altnagelvin Hospital School.
Previous Statements, Depositions and Reports: *[Identify by date and title all those made in relation to the child's death]*

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

Ref:	Date:	
012-007-099 012-041-202	15-06-01 05.02.03	Statement Deposition at the Inquest into the death of Raychel Ferguson

056

Particular areas of interest
[Please attach additional sheets if more space is required]
Describe in detail your role in the treatment and care of Raychel Ferguson, to include:

(i) your concerns and observations in respect of Raychel;

(ii) any discussions you had with medical staff concerning Raychel; and

any instructions you gave to nursing staff in respect of the treatment of Raychel.

Raychel Ferguson was admitted to Ward 6 via the Accident & Emergency Department on the evening of June 7 2001. Raychel had been diagnosed as having acute Appendicitis and later that evening an Appendicectomy was carried out. Raychel had an uneventful post-operative night, her observations were within normal limits (See 020-015-028/029) her intravenous fluids of Solution 18 were in progress at 80mls / hr (see 020-018-037) and overall her condition was stable.

I came on duty at 7.50am on the morning of 8/6/01. I received the handover report from the night staff, which was completed at approx 8.30am. Following the handover report I allocated the staff to their areas of the ward and delegated to them their duties accordingly.

Raychel appeared to be in good form following her surgery, she was bright and alert and communicating with staff. Mr. Ferguson was with Raychel. Mr. Zafar the Surgical SHO came and saw Raychel early morning. Mr. Zafar was happy for Raychel to have small amounts of clear fluids orally. The intravenous fluids were to continue as prescribed. Mr. Zafar spoke to Mr. Ferguson of his plan for Raychel. Dr Makar also came to the ward to check on Raychel shortly afterwards. I explained to him that Mr. Zafar had already seen Raychel so he did not see Raychel but did speak to Mr. Ferguson. I was with Mr. Zafar when he saw Raychel but did not accompany Dr Makar. Dr Makar made no change to Raychel's treatment. I documented the plan for Raychel in the ward 'Treatment Book' which is referred to by staff during the day and also communicated verbally the plan to the nurses caring for Raychel.

During the morning Raychel continued to make good progress. Raychel was sitting at the end of her bed coloring in her book and appeared bright and happy. She was communicating with her father and with staff. During the morning Raychel became more mobile and was able to walk to the bathroom with Mr. Ferguson. Raychel vomited at 10am, 1pm, and 3pm that day (See 020-018-038) I had noted this and it was also communicated to me by the nurses looking after Raychel. I was not concerned as vomiting is not unusual in some children postoperatively. The vomit at 10am had been documented as large and the vomit at 1pm and 3pm as 2++ (020-018-038). It was the practice to document any vomiting in children as small, medium, large or on a scale of 1-4++. The vomit documented, as 2++ would be accepted as small to medium. Raychel's condition appeared to be stable; she did not appear to be dull or lethargic.

At approximately 3.30pm-4.00pm S/N Mc Auley informed me of Raychel's vomit at 3.00pm. I asked Staff Nurse Michalea Mc Auley to contact the Surgical J.H.O or S.H.O to give Raychel some anti-emetic i.e. intravenous Zofan. There was difficulty in contacting the surgical doctors as they were in theatre and did not answer their bleeps. Shortly afterwards Dr Joe Devlin, Surgical J.H.O came to the ward to clerk in a new patient. Dr Devlin was asked to give Raychel an anti-emetic. He did this at approximately 6pm.

I went off duty at approximately 6pm. I had no concerns with regards Raychel's condition. I expected Raychel's vomiting to settle following the administration of intravenous Zofan (020-017-035).I expected her intravenous fluids to be discontinued the next day and for her to be discharged possibly on Sunday. I did not expect anything untoward might develop with Raychel's condition in the early hours of the following day.

Give details of your communications with the parents of Raychel Ferguson both during and after her stay at Altnagelvin, to include:

(i) the nature and content of such communications;

(ii) at whose request the communications took place; and

when and where the communications occurred.

The following are communications I had with Raychel's parents on the 8/6/01:

1.On coming on the ward at 7.30am on the 8/6/01 I went into Room I where Raychel was a patient to retrieve a chair to sit on for the hand over report starting at 7.50am. This is something I do each morning when I come on duty. Mr. & Mrs. Ferguson were with Raychel who was in bed. I said 'good morning' to both parents. Raychel's room was opposite the nurses station and her bed was in clear view of the reception desk.

2. Following the hand over report which was completed at approximately 8.30am I delegated the days duties to the nursing staff and spoke to some of the parents who came to the nurses station to speak to me. Between 8.45am and 9am I went into Room I to replace my chair and again said 'good morning' etc to the children and parents in the room. Raychel was sitting at the end of her bed colouring in a book. Mr. Ferguson was with Raychel as he was all day. Mrs. Ferguson was not at Raychel's bedside and I did not see her again until late afternoon before I went off duty. I spoke to Mr. Ferguson and Raychel and commented that I was surprised to see Raychel sitting up and appearing so bright and alert. I said that it was unusual for children to be so alert and bright so early in the morning following surgery late at night. I went on to explain what I thought might be the plan for Raychel for the day i.e. that I expected: **1** Dr to come and check that Raychel may have fluids orally **2.** Her intravenous fluids might be decreased later in the day if she has tolerated oral fluids, **3.** The intravenous fluids may even be discontinued in the evening if everything was satisfactory, **4.** Analgesia i.e. paracetamol may be given to Raychel if she had any discomfort or pain. Mr. Ferguson did not ask me any questions.

3.Approximately between 9.30am and 10am I was in Room I doing the ward round with the medical doctor (there were two medical patients in Room I). I noticed a vomit basin on Raychel's bed table with a small amount of vomit in it, (just covering bottom of bowel) I understood this to be the vomit as from 8am that morning and it had not been removed and discarded. I cannot remember if I removed it or gave it to one of the nurses to discard. Mr. Ferguson did not make any comment to me. I thought perhaps Mr. Ferguson might be concerned that Raychel had vomited and was hesitant to make his concerns known to me. I reassured Mr. Ferguson and reiterated what I had said earlier, i.e. that Raychel would be offered small amount of fluid orally, and hopefully by later in the day she might be able to have a light diet, and eventually the intravenous fluids reduced or discontinued. I reassured Mr. Ferguson that some children may vomit following surgery, but not to be concerned as Raychel had intravenous fluids in progress and if Raychel was unable to tolerate oral fluids immediately it was hoped that by afternoon she would be more able to do so. I also explained that sometimes the anaesthetic drugs or some bowel spasm following surgery can make children vomit. Mr. Ferguson appeared to be satisfied with what I said and did not express any concerns when asked. Raychel did not express to me that she was in any discomfort or pain.

4. Between 12md and 1pm I was at the reception desk opposite Raychel's room. Mr. Ferguson and Raychel came by the desk; Raychel was walking in front of Mr. Ferguson who was pushing the intravenous drip stand behind her. Raychel had her hand on her abdomen and was slightly stooped over and was walking slowly towards the bathroom. I commented to Mr. Ferguson that it might be easier for

Raychel if a bedpan was brought to her bed instead of her walking to the bathroom. Mr. Ferguson said that Raychel wanted to walk herself and that they would be able to manage. Shortly afterwards (within 1 hour) Mr. Ferguson and Raychel passed the reception desk again on their way to the bathroom. I was on the telephone at the time.

Particular areas of interest (Cont'd)

Explain any contact you had with colleagues at RBHSC following Raychel's transfer to RBHSC

None

Describe in detail your understanding of ward procedures in June 2001 in respect of postoperative fluids in pediatric patients to include the origin of such procedures and your understanding as to responsibility for the prescription of such fluids at that time.

It has always been the responsibility of the medical staff to prescribe intravenous fluids for children. Since taking up my post in Altnagelvin Hospital in September 1976, the practice has been for the admitting Surgical J.H.O or S.H.O to prescribe intravenous fluids for the surgical patients. However it is more frequent that the S.H.O or the Registrar will carry this out. It is the S.H.O or the Registrar that makes the decision to take a child to theatre in the absence of the Consultant.

If required intravenous fluids are prescribed by the Surgical doctor on admission, the amount, the type of fluid, the rate per hr and the signature of the prescribing doctor (020-021-040). It is the nurses responsibility to carry out the prescription and to erect the intravenous fluid. Two nurses will check the prescribed fluid, the amount of fluid, the rate per/hr, type of pump, serial No of pump, Batch No of fluid, date of expiry, and both nurses will sigh the prescription sheet and document the time erected (020-021-040). Before connecting the intravenous fluid the nurses will also check that the correct child is receiving the correct intravenous fluid by checking the name, date of birth, hospital No. on the wrist name band with that on the fluid balance sheet.

Solution 18 had always been the prescribed fluid for use in Paediatric surgical patients in Altnagelvin both prior to surgery and post-operatively. During my 8 years in the R.B.H.S.C in Belfast (1968-1976) this was also the practice. In the R.B.H.S.C it was known as 1/5 N/Saline. In Altnagelvin Hartmann's Solution may be given intraoperatively but on return to the ward the intravenous fluids were continued as Solution 18. The intravenous fluid was continued as prescribed prior to Theatre or the Surgical doctor was asked to re-prescribe the fluid. Solution 18 was perceived to be the 'safe' intravenous fluid for children whereas intravenous Hartmann's was not due to it having no glucose. In very infrequent occasions I have seen intravenous Hartmann's Solution used for longer periods in children with severe burns. These children were always transferred to R.B.H.S.C or I saw this during my time in R.B.H.S.C earlier in my career.

Give details of your role and input into the Critical Incident Inquiry at Altnagelvin following Raychel's death to include the steps you took to ensure that nursing staff were aware of the changes in procedure brought about by the Critical Incident Inquiry.

I returned to duty on 12/6/01 having been off over the weekend. Immediately on coming on duty I was informed of Raychel's sudden death on the 9/6/01 on RBHSC. I was shocked to hear about Raychel as it was something that I had in no way anticipated or expected.

A critical incident meeting was called in the afternoon to review the circumstances of Raychel's death (022-108-334). The meeting was attended by staff who had cared for Raychel both medical and nursing staff. (026-011-012). I also attended the Critical Incident meeting in my role as Senior Nurse; I had been on duty during the day of 8/6/01. Following the meeting an action plan was agreed (022-108-334, 002-108-335, 022-108-336, 022-108-337, 026-004-005, and 026-011-014.) I was involved in implementing the agreed action plan of which the areas pertaining to myself were:

1. To implement daily U+E on all children receiving intravenous fluids. I did this by informing all staff at handover reports, and also ensuring that all senior staff where aware of the plan. Also all children on intravenous fluids would have 'U+E' documented alongside their name in the Ward Treatment Book each morning during handover report.
2. Urinary output should be measured and recorded while intravenous infusion in progress.

This was implemented by informing staff at handover reports. Informing Senior Staff especially who filtered information down the line and at staff meetings.

Following the Critical Incident meeting it was decided that there should be no change in the current use of Solution18 until review. However Dr Nesbitt contacted me the next morning and said that after reflection and contacting other hospitals it was decided to change to intravenous Hartmann's Solution for all surgical patients. Also these patients would have 6 hourly blood glucose monitoring as well as the already planned daily U+E's. Solution 18 would continue to be used in the medical patients unless prescribed otherwise by the doctor.

That morning 13/6/01 I asked the Paediatrician Secretary to type a notice laying out the instructions as to the management of surgical children on intravenous fluids (026-010-011) Dr Mc Cord approved the wording of the notice. I put the notice in a strategic position in the ward office and treatment room and informed all nursing staff, especially Senior Staff to the changes. The information was also communicated at all handover reports. Between July – September I received an Infusion Rate chart for intravenous fluids (026-009-010) from Dr Mc Cord to display on the notice board in the ward office, and the treatment room for medical staff to refer to when prescribing intravenous fluids for children. I photocopied these and got a number laminated to display.

I received a copy of a letter dated July 14 2001 from Dr Nesbitt (026-005-006) to Dr Fulton (Medical Director) informing him of the decisions taken with regards the fluid management in children. I had already by then put on display the typed notice (026-010-011) informing the staff of the change in intravenous fluids, the daily U+E for surgical children and the 6 hourly Blood Glucose Monitoring.

I received a copy of a letter from Dr Nesbitt (026-014-028) to Dr Fulton dated 3/7/01 informing him of the change to fluid management in surgical children. Dr Nesbitt in that letter informs Dr Fulton that he has advised his anaesthetic colleagues to prescribe intravenous Hartmann's for postoperative surgical

children. By then the policy regarding the change in intravenous fluids was being implemented.

The update for the Chief Executive 9/7/01 (022-097-307, 022-097-308) was also relevant to nursing staff including myself. Point 4 (A-G) pertaining to nursing staff. All of these points were implemented at this time.

A meeting with the Ferguson family (022-084-215 – 022-084-224) took place on 3/9/01 at 6pm in the Clinical Education Centre I attended the meeting and found it extremely difficult. I had not attended a meeting similar to it before, the atmosphere was understandably tense and I felt I was not able to give the family the reassurance and explanations that I would have wished. I did try to explain that at no time during my time on duty did I think Raychel's condition was given cause for concern; I had experienced post operative children vomiting many times and was at a loss to explain Raychel's sudden deterioration.

In September I received a letter from Dr Mc Cord to Dr Fulton 24/9/01 (022-096-306) the information is correct in that I did display the said charts in the ward.

Dr Henrietta Campbell issued a letter 23/3/02 (026-019-046.) Re Prevention of Hyponatraemia in children, I received a copy of the same letter.

A critical Incident Review meeting took place on 9/4/02 (026-002-002, 022-092-299, 022-092-300, 022-095-304, and 022-095-305.) The action plan was reviewed most of the action plan points appeared to be implemented and going well.

Two points I would like to comment on. Point 4 of the action plan (022-095-304) 'measuring of all urinary output'. This had proved to be unachievable and was no longer being carried out. It was carried out in all children who had Renal problems such as Nephrotic Syndrome, children who required one to one specialing, children with complex problems e.g. Liver disease/ Transplant patients or children whom the medical staff specifically requested accurate measurement of urinary output.

It was unachievable for several reasons: -
A large busy ward (43 beds).
Children incontinent during the night / day.
Children going to the toilet unknown to staff.
Parents taking children to the toilet.
Children passing urine in shower/bath.
Staffing levels did not allow for all children to have urinary output measured.

The issue had also been discussed at the Northern Ireland Paediatric Benchmarking Group of Senior nurses and they had as a group agreed that it was an unachievable goal for staff. It was important to be aware and document the first passage of urine after surgery and this was adhered to without fail.

Point 6 022-095-305 review of Fluid Balance Documentation
Small changes had been made to the current fluid balance sheet to show exact timing of intravenous fluids, and discontinuation of intravenous fluids. The Northern Ireland Paediatric Benchmarking Group of Senior Nurses was at that time looking at a standardized fluid balance sheet to be used throughout the province in all Paediatric Areas. It was decided await the implementation of the revised form.

I received copy of a letter from Dr Nesbitt (021-049-106) stating recent guidelines from Department of Health re: Hyponatraemia and fluid administration in children. It suggested changing the postoperative

fluid of Hartmann's to 0.45%. Saline in 2.5 % Dextrose. The letter confirmed the solution was available from the Pharmacy. Dr McCord was at that time drafting a consensus statement for the Department, (021-051-109, 021-051-110, 021-051-111, 021-051-112, 021-052-113, and 021-052-114.) I received the draft consensus statement in May 02 and sent a copy to Therese Brown with a covering note. (021-046-100). I also put a notice dated 9/5/02 (021-048-104) on display in a strategic position in the ward and the treatment room. Therese Brown had sought advice from the Pharmacy re: statement and they had made same amendments to the consensus statement, (021-050-108). This updated consensus statement was again displayed in the ward instead of the original statement. The Department of Health Poster was also displayed in prominent position in the office and treatment room.

A covering letter was sent to Dr McCord from Therese Brown, (021-046-101). I received a copy of the letter dated 2/5/03 (021-044-091) from Dr Nesbitt and Mr. Bateson to all Surgeons, Consultant Paediatricians, and Nursing staff, Ward 6 leading out an agreed protocol for Paediatric Fluid Management. This had been implemented and was ongoing. On 23/9/04 I received a copy of letter dated, (23/9/04, 021-039-0872,) from Dr Nesbitt to all Medical Staff reiterating guidelines Re: Hyponatraemia and Fluid Administration in children. The guidelines contained in the letter were being adhered to within the Department.

Other points you wish to make including additions to any previous Statements, Depositions and or Reports
[Please attach additional sheets if more space is required]

Additional

During my long career (35yrs) in caring for sick children I have not seen or been aware of Hyponatraemia in
Post-operative surgical children. I have nursed many children over the years following surgery, and have not seen a child either become ill or die with this condition.

I have also nursed many children who have vomited once or twice, but also those who have vomited several times or indeed vomited for quite lengthy periods, but have not had deterioration in their condition such as Raychel did.

I am confident that Raychel received the highest standard of care from the nursing staff in Ward 6. Raychel's treatment and care was no different from any other child who required a surgical procedure. Intravenous Solution18 was the solution used at that time in most hospitals.

All members of nursing staff were devastated by the death of Raychel especially by those caring for her. It was totally unexpected as she has been recovering very well on the Friday 8/6/01 and it was expected that she would be discharged at the latest on Sunday (June 10th)

Signed: G. T. Millar. **Dated:** 30/6/05.