

LOCAL COURT
New South Wales
Wollongong

Jurisdiction: Coronial

Matter Inquest into the death of JASMINA DJORDJEVIC

Hearing dates: 14,15 16,17,20,21,22 September2010
28 February 2011
3,4 March 2011

Date of Findings: 23 June 2011

Findings of: Ian Guy

Deputy State Coroner, Wollongong

Representation: Ms K Stern, Barrister, Counsel Assisting, instructed by the Crown Solicitor's Office

Mr R Steele, Barrister for the Djordjevic family

Ms K Burke, Barrister instructed by GILD Insurance Litigation P/L, for the Illawarra Shoalhaven Local Health Network (LHN)

Mr N Dawson, Solicitor, Federation Law instructed by NSW Nurses' Association for registered nurses Barlow, Williamson, Collard, Brown, Pretzler, Janssen and O'Hanlon

Mr E Pike, Barrister instructed by Avant P/L for Dr Ooi and Dr Inglis

Ms G Furness SC Barrister instructed by GILD Insurance Litigation P/L, for registered nurse Whitmore

Reasons for Findings

1. In September 2007, Mrs Jasmina Djordjevic, then aged 32 years, was pleased to receive the news that she was pregnant with her second child.
2. Diagnosed with schizophrenia in 1994 and despite some admissions to mental health units several years before, the taking of the anti-psychotic drug clozapine meant she was functioning in the community at a very high level with no psychotic symptoms. Mrs Djordjevic was a regular and compliant patient at the Wollongong Community Mental Health Service (CMHS) who was treating her condition. The Service was aware of her planned and actual pregnancy.
3. Mrs Djordjevic's regular General Practitioner was Dr Fernandez, who was aware of her mental illness but not involved in her treatment. He referred her to a colleague in the practice, Dr Ooi for obstetric care. There was no formal advice from Dr Fernandez to Dr Ooi of Mrs Djordjevic's schizophrenia.
4. Dr Ooi in turn referred Mrs Djordjevic to Wollongong Hospital Obstetrics Department for consideration of an arrangement whereby the Hospital and Dr Ooi jointly manage her pre-natal condition. Dr Ooi did not notify the Hospital of Mrs Djordjevic's mental illness.
5. The CMHS did not notify the Hospital of her condition.
6. Because of her schizophrenia, Mrs Djordjevic was in fact a high- risk patient. There was an increased risk of post partum psychosis and a range of medical complications for both the mother and baby.
7. Mrs Djordjevic attended an antenatal assessment at Wollongong Hospital, disclosing her clozapine medication but telling staff she was suffering from chronic depression. No mental health assessment was arranged.
8. The Hospital held regular pre-natal meetings for persons identified as having psychosocial needs. On 1 May 2008, the day Mrs Djordjevic's case was discussed and coincidentally the day she was admitted to Hospital, there was no representative present from the mental health unit. Not appreciating the full significance of clozapine being used only for schizophrenia, a mental health assessment was not arranged.
9. On 1 May 2008, Mrs Djordjevic attended the birthing unit, where staff began to monitor the baby's condition. An obstetrics registrar examined her, whose disputed evidence was he was unaware of her mental illness. He did not arrange a mental health assessment.
10. The baby was born on 2 May 2008 by caesarean operation performed by an obstetrics registrar. She did not read the Hospital notes that revealed Mrs Djordjevic was taking clozapine prior to writing up her post operative orders. She prescribed clozapine on 2 May 2008 but did not read the

nursing notes suggesting a relapse of the psychosis, nor arrange for any mental health assessment.

11. Mrs Djordjevic had brought her own supply of clozapine to Hospital. Maternity staff became aware of the drug but contrary to Hospital policy did not take and store it. Several staff merely asked whether she had taken it. Contrary to the advice she had, Mrs Djordjevic in fact stopped taking the drug after the birth of the baby.
12. The cessation of clozapine meant a patient with schizophrenia, who was already a high- risk patient, had an increased risk of developing a psychosis.
13. Mrs Djordjevic progressed well in the maternity section until 5 May 2008 until the first of 2 episodes of catatonia and acute psychosis. She was admitted to the mental health unit of Wollongong Hospital as an involuntary patient. Although initially unwell she gradually improved with the reintroduction of clozapine.
14. On 10 May 2008, Mrs Djordjevic had a temperature increase. An on call medical registrar prescribed a number of medications. After they were given, the second period of catatonia occurred. A review by a psychiatric registrar did not occur.
15. From the early hours of 11 May 2008, Mrs Djordjevic was seen to be unresponsive and pacing in the corridors drinking quantities of water. After 7.30 am she began vomiting, and became highly agitated. Staff restrained her in a chair for about 10 minutes. At the instigation of the nurse in charge she was escorted to a seclusion room, placed on the floor and left without staff staying to observe her condition.
16. Various staff members have subsequently returned but in the intervening period, Mrs Djordjevic has injured her face and was seen motioning consistent with banging her head on the floor.
17. A second period of restraint commenced from about 8.40 am to 9.03 am. Restraint was by 4 staff using the prone restraint method. Again, Mrs Djordjevic was highly agitated. At times she was banging her head on the floor. No one was in charge watching her ability to breathe. She became unresponsive. Staff then noticed blue discolouration on her lips consistent with a lack of oxygen (cyanosis).
18. A cardiac arrest was called at 9.03 am. Resuscitation commenced and a pulse was restored after about 19 minutes.
19. Mrs Djordjevic was transferred to the Intensive Care Unit where concern was raised whether she swallowed a corrosive substance within the mental health unit. Burns were seen on her face and chest. CT scans revealed extensive burns to her oesophagus and a cerebral oedema.

20. A search of the mental health unit failed to locate a substance capable of causing the burns. Although a sample of the vomit was sent for analysis, the testing equipment was not suitable and the sample was destroyed.
21. A staff member has challenged the integrity of nursing notes written by some staff in the mental health unit.
22. On 14 May 2008, Mrs Djordjevic died in the ICU at Wollongong Hospital.
23. Professor DuFlou carried out a post mortem on 16 May 2008. The cause of death was recorded as hypoxic brain damage secondary to ingestion of a caustic substance.

THE ISSUES AT INQUEST

24. It can be seen from the outline above that a large number of issues arose about the quality of care provided by a variety of health professionals, the Hospital and the cause of death. They can be conveniently identified as follows—
 - 1.The actions of the GPs, Dr Fernandez and Dr Ooi in particular the absence of communication with the Hospital about her mental illness
 - 2.The actions of the CMHS in particular the absence of communication with the Hospital.
 - 3.The actions of staff at the antenatal unit
 - 4.The actions of the obstetric staff and in particular the absence of a mental health review.
 - 5.The actions of the maternity staff in particular allowing self-medication.
 - 6.The events in the mental health ward in particular the appropriateness of the seclusion and restraint processes; whether prone restraint should be used and the extent of psychiatric input in the decision to medicate seclude and restrain.
 - 7.Whether there was a rewriting of the nurses notes from the mental health ward.
 - 8.Why the sample of vomit was not analysed.
 - 9.What if any substance was ingested and what was the cause of death.

Nature of an Inquest

25. Before turning to the issues, it is important to briefly outline the nature of an inquest. It should be noted that the role of a Coroner is limited by statute, in particular under section 81 of the Coroners Act 2009, to return a finding, where there exists sufficient evidence, as to the identity of the deceased, the date, place, manner and cause of death. An inquest is not adversarial in nature. It is neither a criminal nor civil proceeding.
26. Section 82 allows for recommendations to be made by the Coroner as are considered necessary or desirable in relation to any matter connected with the death with which the inquest is concerned. Such recommendations are more often seen in cases involving public health and safety.
27. Apart from the statutory functions and power to make recommendations, an inquest may serve the important function for family members to understand the circumstances surrounding the death of a loved one.
28. The main focus of this inquest has been the manner and cause of Mrs Djordjevic's death. Multiple volumes of evidence have been presented in an effort to clarify the circumstances of the death and the actions of treating Doctors, the Hospital and staff.
29. It should be noted that it is not the function of the Coroner to make formal findings of negligent behaviour on the part of any particular medical staff involved in the care of Mrs Djordjevic. Nor is the Coroner's role to sit as a type of medical misconduct tribunal. Where specific or systemic failings of an individual or of the Hospital are identified as contributing to the death, any commentary or findings are done so in the context of determining manner and cause of death.

Issue1. The actions of the GPs- Dr Fernandez and Dr Ooi

30. Mrs Djordjevic saw Dr Fernandez for general medical matters from at least 2005. He was aware she suffered from schizophrenia, although her condition was being treated by the CMHS.
31. The GP medical records for 7 September 2007 completed by Dr Fernandez, notes a home pregnancy test was positive and Mrs Djordjevic was pleased she is pregnant. Dr Fernandez has then referred her to Dr Ooi, a colleague in the same practice for antenatal care. The first entry involving Dr Ooi is dated 12 September 2007.
32. Dr Fernandez does however receive two pieces of information from the CMHS after the referral on 13 September 2007. Dr Pai telephoned Dr Fernandez advising she is currently on clozapine. He discussed the risks of stoppage and moving to another antipsychotic medication and the risks and complications of her pregnancy whilst on clozapine. The second piece of information was a letter Dr Pai sent to Dr Fernandez on the 13 September,

which essentially reflected the telephone conversation. The letter states the necessity of close monitoring by GP/obstetrician².

The hand over process to Dr Ooi

33. Although the notes of the telephone conversation and the scanned letter were on the medical records, it is clear Dr Fernandez did not speak to Dr Ooi about the information provided by Dr Pai. There was nothing in Dr Fernandez's evidence to suggest any informal discussion occurred about Mrs Djordjevic's mental condition.
34. Dr Fernandez was correct when he observed the information about Mrs Djordjevic was to be found within the medical records. There was however no informed handover of patient care. It is not to the point the doctors worked in the same practice. It would be reasonable to assume a referring doctor would outline the patient's present condition, current medications and most relevantly, the fact the patient is suffering from a significant mental illness, namely schizophrenia and was on any view a high risk patient.

Dr Ooi's knowledge of her mental condition

35. The nature and extent of Dr Ooi's knowledge of the mental condition of Mrs Djordjevic is unclear. A reading of Dr Ooi's statement suggests no involvement in treatment or knowledge of a mental condition. It states--
*"She was not seen for her mental condition by me and I was not contacted by the community mental health service for any mental health issues --- she was not taking any mental health medications"*³.
36. Dr Ooi's account at the inquest and a review of the medical records suggests greater awareness of her condition and knowledge she was in fact taking medication. It is clear Dr Ooi saw the faxed letter from Dr Pai, which urged close supervision by her GP/obstetrician. Although it is literally correct for Dr Ooi to state the CMHS did not contact him, as the letter was addressed to his colleague Dr Fernandez, he was however put on notice of concerns about the continued use of clozapine during the pregnancy.
37. Dr Ooi's written statement that she was not on any mental health medications is clearly incorrect. It is difficult to understand how such an error could occur. More troubling however is the failure to understand what the drug was and why Mrs Djordjevic was taking it.
38. Dr Ooi acknowledged he took no steps to ascertain why Mrs Djordjevic was taking clozapine, nor was he aware she suffered from schizophrenia. He thought she was taking it for depression. Why he assumed this is far from clear. Dr Parmegiani, expert psychiatrist observed he would expect most doctors to know clozapine is used for schizophrenia⁴. He made the commonsense observation that when confronted with an unfamiliar medication he would look it up.

² GP notes p24

³ b/e vol 1p99

⁴ Parmegiani transcript 22/09/2010 p63

39. It is abundantly clear Dr Ooi did not review the medical records containing the diagnosis of schizophrenia. He had however according to his evidence, read the letter from Dr Pai regarding the need to stay on clozapine during her pregnancy and the need for close monitoring of her condition. Against this background, a failure to ask a basic question why she taking it, and a failure to understand or even check what the drug was that required close monitoring when he is attending to her antenatal care is an extraordinary omission. It is clear Dr Ooi viewed responsibility for Mrs Djordjevic's mental health care was for others, in particular Dr Fernandez. He did not however ask whether this was the case.

The referral to the Antenatal unit

40. On 18 September 2007, Dr Ooi wrote a letter of referral to the antenatal unit at Wollongong Hospital⁵. It thanks the doctor for seeing Mrs Djordjevic indicating she would like to be on the shared care program. It notes the date of her last menstrual cycle, that she is pregnant and already has a living child.
41. No other medical history, including reference to a mental health history or medication is provided. No reference was made to the contents of the letter from Dr Pai, despite the fact on the same date the referral letter was written, Dr Ooi has noted in the GP records—
“See Dr Pai’s letter about staying on clozapine during her pregnancy”
42. The absence of any meaningful information meant the recipient starts the assessment process with no relevant information about a most significant fact, namely her mental condition. There was an understandable acknowledgment by Dr Ooi at the inquest that more information should have been given.
43. An attempt was made to suggest Dr Ooi believed the CMHS and Wollongong Hospital would share information .The inference was the Hospital would be aware of the same information he had been given by the CMHS. This asserted belief came from leading questions to Dr Ooi from his legal representative. Contrary to the written submissions on behalf of Dr Ooi, given his lack of understanding about the nature of the mental condition, the failure to enquire and his implicit view her mental health was for others to consider, I am satisfied Dr Ooi had not turned his mind at all to the question of sharing of information.

The advice from the antenatal unit

44. On 24 October 2007, Dr Ooi received a letter from Dr Davis at Wollongong Hospital advising that Mrs Djordjevic was suitable for a shared care arrangement. It made no reference to any medications. The letter records –

“Her past history involves chronic depression”

⁵ hosp records p331

45. Dr Ooi acknowledged at the inquest it would have been preferable to check whether the statement of chronic depression was correct and to contact the Hospital to ensure they were aware she was taking clozapine.

Conclusion re issue 1

46. A very disturbing picture emerges of a lack of communication between the two doctors and a lack of proper handover of patient care. Dr Ooi failed to properly investigate and consider Mrs Djordjevic's mental condition. There were a series of missed opportunities that should have been taken to put the Hospital on notice she had schizophrenia. A plan to monitor her symptoms and her taking clozapine could have been established.

Issue 2. The actions of the CMHS

47. Mrs Djordjevic was first diagnosed with schizophrenia in 1994. She had a number of admissions to mental health units and a community treatment order was made in 2003. In the early stages her mental state was unstable with derogatory auditory hallucinations.
48. In 2004, clozapine medication was commenced. The results of the new medication were impressive with the symptoms in complete remission. Dr Diana, psychiatrist, described Mrs Djordjevic as functioning at a high level with good insight into her illness and of her need to take clozapine as directed. She was never noncompliant with her clozapine treatment. Since commencing the medication he had no concerns of possible self-harm.
49. As part of the treatment plan, she saw a variety of registrars at the CMHS about each month. Reports were consistent that she was well with no concerns and no psychotic symptoms.
50. In August 2007, Mrs Djordjevic spoke to a psychiatric registrar about issues should she become pregnant. On 13 September 2007, Mrs Djordjevic attended with her mother upon Dr Pai, then a senior psychiatrist with CMHS. Dr Pai prepared and sent a letter dated 13 September to Dr Fernandez. The letter ⁶ notes a number of issues regarding her recent pregnancy, including --
- . Her obstetrician is aware of the pregnancy and being on clozapine.
 - . The need for considering risks of stoppage or shifting to an antipsychotic.
 - . The need for close monitoring by GP/obstetrician.
 - . Desirability of having second opinion by an independent psychiatrist.
 - . Risks related to gestational diabetes, possibility of floppy infant syndrome, neonatal seizures that warrant the need for monitoring in newborns.

⁶ GP notes p24

51. Dr Pai also spoke with Dr Fernandez the same day outlining the above matters contained in his letter. In evidence, Dr Pai explained when someone stops taking clozapine, there is a high risk of reborn psychosis, which is very difficult to treat.⁷ People who have a history of psychotic illness are at a high-risk of developing psychotic symptoms during the first six weeks after delivery, particularly from the second to the sixth week. Postpartum psychosis, according to Dr Pai, is a common occurrence rather than a rare event. Someone with a psychotic illness is well known to have a relapse or a worsening of the symptoms during the postpartum period.
52. In a similar vein to the views of Dr Pai are those of Dr Parmegiani, psychiatrist. He noted the high possibility of psychosis post delivery, the need for day to day monitoring of the symptoms, the need for nurses to be on the lookout for signs of delusions /hallucinations and importantly the handing of the clozapine to Mrs Djordjevic and witnessing her swallow it.⁸
53. Dr Diana, psychiatrist with CMHS also noted the increased risk of a psychotic episode post partum even without the history of schizophrenia and the need for close monitoring of such a patient for any possible psychosis⁹.
54. Aware of the transient nature of psychiatrists within the Illawarra area, Dr Pai directed his attention to the one key consistent doctor who could take care of Mrs Djordjevic. Hence his detailed letter and telephone call to the GP, Dr Fernandez.
55. Had he been involved in seeing Mrs Djordjevic in the third trimester of pregnancy, Dr Pai would have seen it as part of his responsibility to discuss her management with the obstetric team caring for her at Wollongong Hospital. He considered it proper medical practice for one of the psychiatrists at the mental health team to get in contact with the obstetric team to discuss Ms Djordjevic's management.
56. Dr Pai saw the ideal position as a multi disciplinary case conference including the obstetric nurse, treating GP, treating obstetrician and treating doctor from the mental health team. The focus would be the medication and common side-effects, special monitoring necessary with clozapine, the potential for drug interaction between clozapine and obstetric related drugs and the potential impact of clozapine on the child including the need to look for any foetal abnormalities.
57. The reality was far removed from the ideal position advanced by Dr Pai. There was in fact no communication at all between the CMHS and the obstetric team at Wollongong Hospital nor was there any system in place for such communication to occur. The focus at the CHMS was one of monitoring her taking of clozapine. Mrs Djordjevic saw a number of

⁷ 15/09/2010 p34

⁸ 22/09/2010 p48

⁹ Diana 13/09/2010 p44

psychiatric registrars yet there was no single case manager assigned to review and care for a high risk patient beyond the issue of the administration of clozapine.

Conclusion re issue 2

58. The psychiatrists would have been well aware of the potential risks facing Mrs Djordjevic, but no system existed for those concerns to be made known to the Hospital's obstetrics team. No management plan as suggested by the experts was put in place. This was a major failing in proper patient management.
59. It is noted that there is now a protocol in place to ensure that there is liaison between patients at the CMHS and antenatal care at the Hospital and there has been appointed a Safe Start Clinical Nurse Consultant to improve communication between the Hospital and other health providers.¹⁰

Issue 3. The actions of the antenatal staff

60. Mrs Djordjevic attended Wollongong Hospital on 19 October 2007 as part of the booking in process. The hospital records contain the referral from Dr Ooi dated 18 September 2007. The booking history notes the intended model of care as GP/Hospital medical shared care.¹¹
61. Within the booking history form, under the heading past health history, is recorded the word "depression". The mental health treatment is recorded as clozapine. It correctly notes the morning and evening dosages. A psychosocial assessment was completed. Recorded against the heading mental health disorder is the word "depression". The medication is correctly described as clozapine. In a section referring to pregnancy and related anxiety is recorded the word "chronic depression".
62. Although the type of drug is correctly recorded, the description of the mental disorder as depression is clearly incorrect. Whether it was concern about disclosure of the exact mental illness or confusion on her part, I am satisfied the information recorded by the midwife who conducted the booking process was given Mrs Djordjevic.
63. By an unknown means, Mrs Djordjevic's case was referred to the antenatal hospital intake meeting held on 1 May 2008, coincidentally the date she was unexpectedly admitted to hospital. Registered nurse Avramoska stated an intake meeting is held weekly for women who have psychosocial issues identified at the booking in process. Meetings occur in the absence of a patient. The aim is to identify any further planning required throughout the pregnancy. Meetings are attended by staff from drug and alcohol, a midwife and social worker. There was prior to about May 2008 staff from the mental health unit in attendance. Early in 2007, mental health staff was not funded

¹⁰ Business rule for identification and support of women with pregnancy needs receiving mental health care coordination—see Recommendations folder p1 and update report to Coroner dated 26 May 2011 as to implementation of recommendations

¹¹ hosp records p217

to attend. There was no mental health representative present at the intake meeting on 1 May 2008 to discuss Mrs Djordjevic's case¹².

64. Nurse Avramoska appropriately checked with a mother safe representative by telephone about clozapine. The resultant plan was that an antenatal social worker would attend Mrs Djordjevic and the baby would be observed for signs of clozapine side effects.
65. Those at the intake meeting were not assisted in their consideration of Mrs Djordjevic's care by number of factors ---
 - . The booking history form incorrectly described Mrs Djordjevic's mental illness.
 - . The front page of the antenatal record that provided for a section headed past illnesses (including psychiatric) was left blank.
 - . The referral letter from Dr Ooi made no reference at all to Mrs Djordjevic's mental illness.
 - . There was no information from the CMHS despite their knowledge of her pregnancy and her mental condition.
 - . The antenatal record entry made on 19 October 2007 records a social worker referral was made. There is however no documentation evidencing that a social worker made any contact with Mrs Djordjevic.
 - . Most significantly, there was no qualified mental health representative at the meeting.
66. It is clear those at the intake meeting did not appreciate the significance of clozapine and the inconsistency of taking such a drug for treatment of depression. Had a mental health nurse been in attendance at the intake meeting, the fact clozapine is an antipsychotic drug would in all likelihood been appreciated and would have led to earlier involvement with the mental health services and monitoring of her condition.

Conclusion in relation to issue number 3

67. There were missed opportunities to properly record Mrs Djordjevic's mental illness and to correctly respond to that history by way of an early mental health review and monitor symptoms and compliance with clozapine. It is clear no one appreciated she was in fact a high-risk patient.
68. To have intake meetings that seek to properly address a patient's psychosocial issues and develop a patient care plan yet not have a mental health representative at the meeting was both a remarkable and significant failing in the hospital system.

¹² 16/09/2010 p26-44

69. It is noted changes have since been made with the creation of a mental health nurse specialist and a case management model for patients with complex needs.¹³

Issue 4. The actions of Obstetric staff

Dr Woo

70. Dr Woo was a second year trainee in obstetrics and gynaecology who performed the caesarean section operation on 2 May 2008. She was not aware at the time of the operation Mrs Djordjevic was a schizophrenic or taking clozapine.
71. Dr Woo had prior experience in caring for women during childbirth who were taking antipsychotic medication, although not specifically clozapine. She was aware there is a risk of postpartum psychosis in a woman suffering from schizophrenia and aware of the corresponding higher risk of complications in the obstetric and neonatal period. She was not however able to identify what those risks were.
72. Despite this apparent knowledge, it is clear Dr Woo has given little consideration to Mrs Djordjevic's mental condition and the associated risks when performing the caesarean operation and later when asked to prescribe the clozapine. Several statements by Dr Woo underscore her view mental care was not her responsibility. She stated—
“Her psychiatric issue has been managed usually by someone else and her presentation, in terms of labour and childbirth, that hasn't been an issue for us.---- when I got involved with her care, my care was basically to deliver the baby and she's been booked for caesarean section and that's my involvement with her, wasn't considered at that time that her mental health or her mental state during that time was an issue”¹⁴. (T38)
73. The postoperative orders in the operation report are silent as to Mrs Djordjevic's mental condition and mental health medication. Not only did Dr Woo fail to consult the medical records which referred to clozapine, remarkably, her post operative orders would have been no different even if she was aware Mrs Djordjevic was schizophrenic on long-term medication.
74. Why a surgeon who has care of a patient and aware of risks of post partum psychosis would leave it for another person who may not pick up the issue is difficult to comprehend. Perhaps understandably, pressed why if she were aware, she would not refer in the post operation orders a reference to her mental condition and associated risks, she said—
“I'm not sure I can answer that”¹⁵.
75. On 2 May 2008. Nurse Williamson became aware Mrs Djordjevic was taking clozapine and after checking with the in-house medication registrar

¹³ Recommendations folder p2

¹⁴ 14/09/2010 p38

¹⁵ 14/09/2010 p42

found it was an antipsychotic. She then asked Dr Woo if Mrs Djordjevic could take it.

76. What Dr Woo was told the drug is used is for is disputed. Nurse Williamson says she told her it was for schizophrenia. Dr Woo says she was told it was for depression in the antenatal period. She looked at the antenatal file and booking history in particular which referred to clozapine. As Mrs Djordjevic had the medication with her she prescribed it on the medication chart.
77. On Dr Woo' account, she was aware clozapine was an antipsychotic drug, but did not know whether it was an appropriate medication for a person suffering from depression. It is clear Dr Woo made no proper enquiry to satisfy herself taking such a drug was appropriate in the circumstances. She made no contact with anyone from the mental health unit, did not speak directly with Mrs Djordjevic, nor read the nursing entry prepared by Nurse Williamson. That entry referred to clozapine being an antipsychotic, a denial ever seeing a psychologist or psychiatrist and hearing noises. Had this note been read, it should have rung alarm bells and prompted an appropriate review by the mental health unit.
78. Asked why she had not read the entry note before making the decision to prescribe the drug, Dr Woo said --
"Because I'm just writing the medication on the medication chart for her so that Jasmina could take her usual medication and it is policy that anyone in hospital even taking usual medication needs to be prescribed by the medication chart"¹⁶.
79. On any view this disturbing reply demonstrates a lack of understanding by Dr Woo of her responsibilities as a doctor to properly consider the appropriateness of prescribing medication of any sort, let alone an antipsychotic drug.
80. Had she appreciated Mrs Djordjevic either did suffer from schizophrenia or may have suffered from a psychotic illness, Dr Woo said this would have been beyond her capabilities and would have referred her onto the mental health team as a matter of urgency.
81. If Nurse Williamson's account is correct that she told Dr Woo the drug was for schizophrenia, the decision not to do as Dr Woo has properly suggested, namely to arrange an urgent mental health review, is of particular concern.
82. If she was not told it was for the treatment of schizophrenia, she was nevertheless clearly aware it was an antipsychotic drug. The failure to consider Mrs Djordjevic may as a consequence be suffering from a psychotic disorder is equally of concern.

¹⁶ 16/09/2010 p45

Dr Wanat

83. Dr Wanat was an obstetrics registrar of some 7 Years experience and the attending doctor on 1 May 2008 when Mrs Djordjevic was first admitted to the birthing unit. He saw her on a number of occasions into the early hours of 2 May 2008, in each case speaking with her and monitoring the trace on the baby.
84. Dr Wanat's statement dated 29 April 2009 referred to a hospital entry at 7 p.m. on 1 May 2008 following his first attendance¹⁷. It was to the effect the patient has no significant problems other than those related to pregnancy. He could only assume she did not disclose to him her previous psychiatric history, otherwise he would have made a notation of it and informed nursing staff. His statement records he was not aware Mrs Djordjevic was taking clozapine.
85. Dr Wanat said a patient diagnosed as schizophrenic taking clozapine would need very close monitoring during labour and the postnatal period with the condition carrying higher risks for the mother. If he were aware, he would definitely have informed the mental health unit and sought an urgent referral for their involvement.¹⁸
86. Dr Wanat's assertion he was unaware of the clozapine must be seriously questioned given the evidence of Nurses Barlow and Cahill. Nurse Barlow said having taken over the care of Ms Djordjevic in the late evening of 1 May 2008, she became aware in particular from the booking history and antenatal file that Mrs Djordjevic was taking clozapine. She was aware at the time it was an antipsychotic and discussed this with her supervisor Nurse Cahill.
87. Nurses Barlow and Cahill said they told Dr Wanat about the clozapine, who explained this might account for the baby trace results. Dr Wanat was recalled at the inquest. He accepted it was possible a conversation about clozapine did occur but he cannot now recall it.
88. It is clear from the nursing entries Nurse Barlow was aware of clozapine. It is plausible when there was an issue about the variability of the baby's trace, the topic of clozapine was in fact raised. On this basis, Dr Wanat was aware of the existence of clozapine yet failed to pursue this fact in any meaningful way, despite his knowledge of the risks to the baby and the patient and need for close monitoring. Nor did he implement what he stated should happen, namely urgent involvement of the mental health unit.
89. If Dr Wanat was not told and was not aware of the clozapine, he nevertheless failed to take a comprehensive history in his discussions with Mrs Djordjevic, failed to properly view the file, and in particular the booking history and antenatal record which referred to clozapine. He also failed to

¹⁷ b/e tab 23

¹⁸ 14/09/2010 p61

read the nursing note completed by Nurse Barlow on 1 May that referred to a night dose of clozapine. It was not a case where an emergency operation was required that might preclude a proper review of the file or a discussion with Mrs Djordjevic about her medical history and medication.

90. Dr Wanat attended on 3 May 2008 to review Mrs Djordjevic .He again failed to read the recent nursing entry by Nurse Williamson that referred to Mrs Djordjevic hearing noises and the question of a mental health review. Dr Wanat acknowledged it was his responsibility to ensure a full and proper medical review was conducted and that he was aware of any medication being taken. These responsibilities were not discharged in an effective and professional manner.

Nurse Barlow

91. As mentioned above, Nurse Barlow reviewed the file, saw the reference to clozapine in the antenatal records and noted it was not prescribed on the medication chart. She was aware it was an antipsychotic and of the risk of development of post partum psychosis. She checked Mrs Djordjevic had not taken it as she was nil by mouth pending her operation. As it was postponed, she helped remove the clozapine from the cardboard container and saw her take a night dose. Her nursing entry at 11.50 pm on 1 May 2008 records---

*Jasmina took her night dose of clozapine*¹⁹

92. Nurse Barlow's intentions were sound .She had bothered to read the file and on her account, spoke to both Dr Wanat and Mrs Djordjevic about the clozapine. She did not however chart the medication nor take it away, something she acknowledged should have occurred.

93. Conclusion on issue 4

There were significant failings by Dr Woo and Dr Wanat in their care of Mrs Djordjevic and missed opportunities to monitor her symptoms, compliance with clozapine and involve mental health staff at an earlier stage. Nurse Barlow's lack of knowledge of medication storage and management was symptomatic of a greater failing by the Hospital in education and training.

Issue 5. The actions of maternity staff

94. Following the delivery of the baby in the morning of 2 May, Mrs Djordjevic arrived on the maternity ward in the early afternoon. It is clear from her later statements to mental health staff that Mrs Djordjevic decided to largely stop taking her clozapine. Whether this decision arose from concerns about the impact upon the baby from breastfeeding or from feeling well is unclear. Whatever the reason, it was compounded and assisted by the actions of staff in the maternity ward in failing to properly store and administer the clozapine.

¹⁹ hosp records p96

Nurse Williamson

95. Nurse Williamson had the care of Ms Djordjevic on the evening of 2 May 2008. During a conversation, Mrs Djordjevic asked whether she could take her anti-depression medication, clozapine. She confirmed via the hospital medication system her understanding it was an antipsychotic. Mrs Djordjevic told her she had not seen either a psychologist or psychiatrist nor been admitted to a mental health unit. These statements were clearly incorrect. She said she heard noises. Asked whether they were voices, Mrs Djordjevic then denied hearing noises. Nurse Williamson's nursing entry records in essence a proposal for a social work review the following day and raises as a query, a mental health review.
96. Nurse Williamson says she saw Ms Djordjevic take a dose from our own supply. The nursing entry records –
S. /B. o&g Reg -- okay clozapine. Same given²⁰.
97. The medication chart on the afternoon of 3 May 2008 records an entry of "self" against clozapine. Nurse Williamson agreed it was very possible she had just asked whether she had taken it and was told she had.
98. Although the issues addressed by nurse Williamson of a social work and mental health review were appropriate, no mental health review was undertaken until the episode of catatonia on 5 May. This suggests a failure in the system for follow up after handover.
99. To her credit, Nurse Williamson actively researched the drug, spoke with Mrs Djordjevic and consulted with a doctor. It is however an indication of the level of systemic failings in the care of Mrs Djordjevic that it required a junior nurse to do her own research and that only occurred from an unexpected question whether she could take her medication.
100. Just as with Nurse Barlow, Nurse Williamson was unaware of a hospital medication management policy and allowed Mrs Djordjevic to keep the medication. To rely on a patient to tell her whether the clozapine was taken was simply not appropriate. On the available evidence, it is probable Mrs Djordjevic failed to take her evening dose of clozapine on 3 May 2008.

Nurse Brown

101. Nurse Brown had the care of Mrs Djordjevic during the afternoon/evening shifts of 3 May and 4 May 2008. She was aware clozapine was used specifically for schizophrenia.
102. Nurse Brown said she gave Mrs Djordjevic the evening dose of clozapine on 3 May, it was on the medication trolley and had been taken off the patient. As for 4 May, although she cannot remember her taking the clozapine, given the nature of the drug, she wouldn't have taken it by herself. The implication then is Mrs Djordjevic was in fact given the clozapine on both occasions. I am satisfied however Nurse Brown is

²⁰ hosp records p97

mistaken as to her recollection and the medication was not in fact given on either occasion.

103. It is clear in making her statement some 17 months after the event, reliance was placed primarily upon the clinical notes rather than an independent memory. She is mistaken that a conversation between nursing staff including Nurse Collard about patients not taking and possessing their own medication occurred on 2 May 2008. Nurse Collard was not on duty that day and says the discussion occurred after Mrs Djordjevic had been transferred to the mental health unit.
104. Nurse Brown's assertion the medication was removed from the patient is also at odds with nurse Collard's account. Similarly, Nurse Williamson said the medication had not been taken away and kept on the trolley. Nurse Brown conceded she might be mistaken in her belief that Nurse Williamson said the medication was taken from Mrs Djordjevic.
105. Furthermore, Nurse Brown accepted her notations "self" in the medication chart were used to indicate where the patient self administers medication and also where a patient tells her that it has been taken even if unobserved²¹.
106. There is also of course statements from Mrs Djordjevic that she was noncompliant with her clozapine after the birth, lending further support to the conclusion the drug was not being administered and the word "self" merely reflected albeit incorrect advice from Mrs Djordjevic she had taken clozapine. I am satisfied Mrs Djordjevic did not take the evening doses of clozapine on 3 and 4 May 2008.

The quality of the handover

107. Nurse Brown's evidence also raises concerns as to the adequacy of any review by her of earlier nursing entries and the quality of the handover process between the shifts. She was unaware a query had been raised in the notes by Nurse Williamson on 2 May 2008 about a mental health review, nor was she aware Nurse Williamson raised whether or not Mrs Djordjevic had any psychotic symptoms.
108. The lack of appreciation and investigation of Mrs Djordjevic's mental condition was not helped when nurse Brown didn't know why Ms Djordjevic was taking the drug nor consider whether she was schizophrenic. Moreover she failed to assess and follow up any emotional needs of Mrs Djordjevic on both days of her care, evidenced by her failure to complete the relevant section of the clinical pathways records.

Nurse Collard

109. Nurse Collard cared for Mrs Djordjevic during the morning shifts of 4 and 5 May 2008. She was aware clozapine was an anti-psychotic for

²¹ 16/09/2010 p75

schizophrenia and understood from the handover it was being taken for severe depression. She was however unaware of any Hospital medication policy and laboured under the misunderstanding that in the maternity ward, patients who brought their own medication could keep it with them.²²

110. She did not see the medication, the packaging or Mrs Djordjevic taking it. She is definite the medication was not on the Hospital medication trolley and entered the words "self" on the medication chart on the morning of 4 and 5 May 2008 on the advice from Mrs Djordjevic she had taken it. I am satisfied Mrs Djordjevic did not take the clozapine on either the morning of 4 or 5 May 2008.

The missed doses and the consequences of non-compliance

111. Contrary to the written submissions on behalf of the nurses, I am satisfied there is no evidence Mrs Djordjevic had the clozapine on the morning of the caesarean operation on 2 May 2008. She had the evening dose on 2 May 2008. I am satisfied she missed her morning and evening medication on 3 May and 4 May 2008 and her morning dose on 5 May 2008.

112. Although Dr Parmegiani, psychiatrist, is unable to say on the balance of probabilities that the relapse of psychosis would not have happened in any event, as she was already at high risk of relapse even continuing with the clozapine, he said stopping the clozapine even for a brief period would have increased the likelihood of and was a significant factor in the relapse.²³

Conclusion on issue 5

113. The lack of understanding of the Hospital medication policy by several nursing staff indicates a systemic problem existed in the proper education of staff on a significant matter involving patient safety.
114. Mrs Djordjevic's comments to Nurse Williamson about hearing voices should have raised a flag about her mental state and a mental health assessment undertaken the next day. It did not happen. The failure to follow up on Nurse Williamson's query about a review indicates an ineffective system of handover of patient care between staff.
115. It is noted the medication management policy has since been clarified with education of staff and auditing of compliance.

Issue 6. Events in the mental health unit ward.

116. The main issues to be considered within the mental health ward are in summary–

1. The placing of Mrs Djordjevic in the seclusion room.
2. The restraint of Mrs Djordjevic.

²² 16/09/2010 p94

²³ 22/09/2010 p 51,59

3. Whether the practice of prone restraint should continue.
 4. The medication prescribed on the ward without psychiatric medical input.
 5. The extent of psychiatric input into the decision to seclude, restrain and medicate.
 6. Whether there was a rewriting of the mental health nursing notes.
117. The precise chronology of events surrounding the first restraint, placement in the seclusion room, the second restraint and subsequent arrest are difficult to determine. Recollection of some events by witnesses differs considerably with many answers qualified as to their accuracy. Some witness statements were made many months after the incident and in some cases without reference to the Hospital notes.
 118. The most contemporaneous record of events comes from the nursing entries and a debriefing of staff. There is however in relation to some of the notes and in particular those prepared by Nurse Janssen, a challenge to their integrity.

The first episode of catatonia

119. It appears from an obstetric view, Mrs Djordjevic had progressed well .An entry in the hospital notes on 5 May 2008 at 9 am recorded the plan for her discharge after a wound check. This was however the first of 2 episodes of catatonia experienced by Mrs Djordjevic.
120. About 9.45 am on 5 May, Mrs Djordjevic was at the nursery and heard to shout out “No, no”. She would not interact with staff. A mental health review was conducted by psychiatric registrar Kim, who found her mute and unresponsive. She was told as part of the request for a review she was a known schizophrenic on clozapine. After speaking with Dr Diana from the CMHS, she concluded Mrs Djordjevic was at risk of harm to herself and others and was scheduled as an involuntary patient. The medical reports under the Mental Health Act prepared by Dr Chandra recorded post partum psychosis, whilst Dr Tietze records acute psychosis with a reported history of an appearance of catatonia and recently missed doses of clozapine.²⁴
121. As the risks to Mrs Djordjevic were at the time unclear Dr Kim’s plan was for an admission to the smaller acute facility at Pt Kembla Hospital mental health unit. For reasons that remain unclear and although it appears Mrs Djordjevic wanted to go there, this did not eventuate. After a medical clearance, Mrs Djordjevic was admitted to the Wollongong mental health unit about 5 pm on 5 May.
122. A registrar reviewed Mrs Djordjevic on 6 May. The notes record her saying she stopped taking clozapine after the baby was born, she felt well so she

²⁴ Hospital records p 77

stopped and she had done a stupid thing.²⁵ She was hearing a male voice telling her to do things. She denied thoughts of self-harm or to the baby. The plan was for visits to the baby with an escort, a continuation with clozapine and to consider either a transfer to Shellharbour or remain at Wollongong with the baby.

123. On 7 May she was noted to be quiet and isolative spending much of the time pacing. She was escorted to see the baby. A registrar review noted evidence of continued thought blocking.
124. On 8 May, she was noted to remain mute and just stared at the baby. An evening nursing note records her as vague and perplexed.²⁶
125. The nursing notes suggest a modest improvement in Mrs Djordjevic's mental condition. Although noted to be withdrawn and not speaking, the voices were gone and she felt good. She was allowed unescorted leave to visit the baby. In fact on 9 May, she and her husband left the unit and went out to dinner returning to the unit that evening. Staff at the neonatal unit reported she was more reactive and appropriate with the baby.

The second episode of catatonia

126. On 10 May, a resident medical officer was called to review Mrs Djordjevic following an increase in temperature. A loud expiratory wheeze in the right lung was noted. The plan was for a chest x-ray, blood test and a series of medications prescribed including dostinex to suppress lactation.
127. When being escorted to the x-ray unit the second episode of catatonia commenced. She could not weight bear, returned to the ward in a wheelchair with a sling needed to lift her back to her bed. A review by a registrar recorded her as catatonic, not moving her eyes and drooling. Nurse Gouvas described it as gastric juices pouring out of her mouth.²⁷ Dr Pai was contacted and the plan was for a continuation of the clozapine, x-ray and care level 2 observations. Drooling can be a sign of a relapse of psychosis²⁸.
128. A medical officer review considered the blood results and subsequent x-ray. The plan was to change cephalax to augmentin and to add azithromycin to the medications.
129. She was returned later to the x-ray unit. Nurse Preztler said at the x-ray and on return to the ward, she was almost elated with pressured speech, reactive and somewhat overfamiliar. She agreed it appeared a sign of mania and she should have arranged a doctor to review her.²⁹

²⁵ Hospital records p 103

²⁶ Hospital records p 107

²⁷ 20/09/2010 p66

²⁸ Pargegiani 22/09/2010 p52

²⁹ 20/09/2010 p33

130. There is no further nursing entry about this apparent sign of mania. In fact, the subsequent entry by Nurse Bell indicates catatonia symptoms were present. An entry made at 10.25pm records her as not responding to staff or family and drooling, not eating or drinking.³⁰ A dose of diazepam was given at 7.40pm but vomited up shortly thereafter.
131. The patient observation chart records her being in her bed from 8.40pm until 1.50am³¹. Thereafter the 10 minute entries record her in the lounge, hall or foyer essentially pacing and drinking large amounts of water from a water fountain near the nurses' station. Nurse Whitmore and HASA Pertovt both describe her as appearing to drink "copious" amounts of water. She was believed to be urinating frequently. She was not talking, unresponsive but according to HASA Pertovt was calm as she continued to pace.

The first restraint

132. At about 5.50 am HASA Pertovt unlocked the door to the patients' dining room and asked Mrs Djordjevic if she would like to make a cup of tea. She was later seen there drinking a cup of tea or coffee. At some stage after 7:30 a.m. and before 8 a.m., Mrs Djordjevic began vomiting near the nurse's station. She was moved away from other patients to the western lounge where she continued to vomit.
133. Nurse Janssen paged the on-call medical officer, Dr Inglis, and obtained a telephone order for maxalon, an anti-emetic. The records note the phone order at 8:10 a.m. and Nurse Janssen states the injection would have been given within one or two minutes thereafter.
134. At least 2 vomit bags each about 200 mills were collected. Staff observed the vomit had an appearance of bloodstains and a telephone call was then made for the medical officer to attend.
135. Mrs Djordjevic became highly agitated. HASA security staff Palmer and Radic attended and commenced to actively restrain her in a chair holding her arms. Among the descriptions given of her actions were --- Striking out and being violent³²; Trying to punch, scratch, spit and swear³³; Just totally out of control³⁴; seen to try to stick her fingers down her throat³⁵.
136. Exactly who was involved in the first restraint is unclear. HASA Palmer and Radic suggest they were the only staff restraining her although Nurse Wade says he also assisted. The authorisation for restraint completed by Nurse Hemmings says Nurse Janssen was involved in the restraint yet she denies this saying her role was to administer the maxalon.

³⁰ hospital records p114

³¹ hospital records p 950

³² Palmer 22/09/2010 p3

³³ Radic 21/09/2010 p 81

³⁴ Hemmings 17/09/2010 p56

³⁵ Pretzler 20/09/2010 p39

137. This first restraint lasted approximately 10 minutes from 8.20 to 8.30 am. The form recording the fact of the restraint and who authorised it was completed by nurse in charge Hemmings³⁶. Although a nurse may authorise restraint, she has incorrectly noted the person approving the restraint was Dr Ediriweera, the Psychiatric registrar at Shellharbour Hospital. Although he did speak with staff and Dr Inglis by phone, he was not asked to approve either the first or second restraint.

Issue 6.1. The placing of Mrs Djordjevic in the seclusion room.

138. The seclusion room is located away from the general ward and is not in view from the nurses' station. It contains only a mattress and some observation windows and lockable door.

139. According to Nurse Hemmings, staff was becoming exhausted trying to hold on to Mrs Djordjevic and her behaviour was worsening.³⁷ She decided she should be moved to the seclusion room. Hospital policy allows for nursing staff to decide if there should be seclusion. It is clearly however an option not lightly taken.

140. Nurse Hemmings incorrectly nominated Dr Ediriweera as approving the restraint. Even allowing for the difficult and traumatic circumstances, it is difficult to understand how these errors occurred. There was in fact no medical psychiatric input into the decision to restrain or seclude.

141. Mrs Djordjevic's behaviour was described as very aggressive trying to get out of their hold and dragged to the seclusion room³⁸; fighting and thrashing the whole way³⁹; when they let go in the room she was agitated and aggressive trying to reach out and scratch them⁴⁰.

142. Nurse Hemmings described her order for seclusion as one taken with a hint of "optimism"; that sometimes placing in seclusion will have a settling effect. She described it was "a bit of a gamble putting her in there".⁴¹ It was undoubtedly a "gamble" when dealing with a patient who was minutes earlier violently ill and behaving in an agitated and aggressive way never seen before.

143. The HASA staff and nurse Janssen left her in the room and locked the door. HASA Palmer says she was placed on the mattress. Unusually, neither he nor Nurse Janssen has any recall at all how she was when they left her. However, the extraordinary aspect is that no one stayed to observe her through the room windows.

³⁶ Hospital records p68

³⁷ Hemmings 17/09/2010 p59

³⁸ RADIC 21/09/2010 P83

³⁹ Janssen statement vol 1 p126

⁴⁰ Radic 21/09/2010 p84

⁴¹ Hemmings 17/09/2010 p59

144. Nurse Janssen's statement she did not think Mrs Djordjevic was at risk and there was no reason to check her is very difficult to accept.⁴² Described by witnesses as out of control, scratching, hitting out, trying to put her fingers down her throat and being dragged to the room, Nurse Janssen's statement she was not harming herself prior and didn't believe she would is in the circumstances disconcerting.
145. Nurse Hemmings did not direct a person wait and observe her .She was unaware of the unit's practice that a staff member stay and observe a patient placed in seclusion.⁴³ It would appear by nurse Janssen's decision to leave her alone that she was also unaware of the practice.
146. Nurse Hemmings has failed to understand the so-called 10-minute check is not mandated as the appropriate observation time. The hospital Directive, Seclusion Practices in Psychiatric Facilities, does not mandate the observations shall be every 10 minutes. Rather, it is the **minimum** standard required .The policy says—
- The aim of observation is to assess the patient's behaviour and ensure the patients physical safety while in an isolated environment. The ideal is for continuous monitoring and routine assessment of the patient's consciousness levels where appropriate.*⁴⁴
147. There was nothing to prevent staff from staying and doing what the policy advocated. The policy of watching the patient is supported by Dr Parmegiani, psychiatrist –
- “ I think that once a patient is in seclusion they really need to be observed on a ongoing basis”*⁴⁵

Conclusion on issue 6.1

148. That at the every least an experienced senior nurse in charge was unaware of the unit's practice of watching the patient indicates a serious failing in education of staff. But in any event, it should not require knowledge of such a practice to realize as a matter of good nursing care that a patient acting so violently and out of character should not be left alone.
149. That there existed such an informal practice, a lack of understanding by senior staff of the minimum 10 minute rule, the view of Dr Parmegiani and the recent change at the LHN mandating continuous observation for patients placed in seclusion raises is in my view a need for a Statewide review. On one view, like mental health facilities should have a consistent approach. The LHN policy⁴⁶ introduced on 16 March 2011 appears to require continuous visual observation by a single reference, among many criteria for care level 1 of “episodes of seclusion”⁴⁷. Arguably a clearer,

⁴² Janssen 21/09/2010p20

⁴³ O'Hanlon 21/09/2010 p46

⁴⁴ B.E vol2 p280

⁴⁵ Dr Parmegiani 22/09/2010 p54

⁴⁶ Written submissions by LHN, para 8

⁴⁷ Patient care levels for acute mental health inpatient units policy march 2011, p4

discrete statement that persons placed in seclusion shall be monitored continuously would overcome any potential misunderstanding.

Issue 6.2. The restraint of Mrs Djordjevic

150. Mrs Djordjevic was locked in the seclusion room about 8:30 a.m. The second period of restraint commenced approximately 8:40 a.m. and continued for approximately 23 minutes until ultimately 9.03 a.m. when an arrest was called by nursing staff.

151. Who first saw Mrs Djordjevic after she had been left alone is unclear, as is the manner in which some participated in the restraint. What is clear from the outline below is in the intervening period when Mrs Djordjevic was left unobserved she has caused herself facial injuries by banging her head on the floor.

152. HASA Radic said he went and came back one minute later to the seclusion room.⁴⁸ He thought her behaviour questionable namely she was naked from the waist down and touching herself. He reported it to a nurse but did not immediately return to the seclusion room. He accepted however there was nothing in his statement made on 12 June 2008 about the one-minute and subsequent notification. There is no reference in the de brief minutes that supports this one minute account although there is reference to the topic of similar behaviour in a note attributed to nurse Hemmings---

Client located in seclusion at 8:30 a.m. Zoran and Susan observes patient three minutes later and she was removing clothing and appeared confused (look like organic delirium)⁴⁹

153. Nurse Hemmings says when they went to the room, she appeared to have settled and went back later to do the 10-minute check. As far as she was aware, no one had made any observations during that approximate 6 minutes. It is curious that a stated second visit to the seclusion room was in accordance with the policy of 10-minute observation check and apparently not in response to any urgent notice from other staff that Mrs Djordjevic was in fact committing self-harm.

154. That Mrs Djordjevic was committing self-harm in the seclusion room is amply demonstrated by the following accounts --

. Nurse Hemmings described the actions as like someone on their knees doing push ups moving their head forward.⁵⁰ She doubted the damage seen on her face (she saw a bloody face) could have been caused by that action.

. HASA Radic said when he did return he saw her bashing her head on the floor with "some force" and saw bruising and blood on her face.⁵¹

⁴⁸ Radic 21/09/2010 p84

⁴⁹ B.E vol 3 tab 75

⁵⁰ Hemmings 17/09/2010 p 62

⁵¹ Radic 21/09/2010 p86

. HASA Palmer saw her lying on her stomach hitting her head with force but did not see any facial injury.⁵²

. Nurse Pretzler says she continued with her rounds, was told Mrs Djordjevic was in the seclusion room, went to check on her and saw her banging her head. As she was pregnant, she did not enter the room but went and told a nurse whose name she can now not recall. She later described it as like "some bizarre motion lying on the floor trying to bang her head but wasn't."⁵³

. Nurse Wade said he was unable to remember whether he went on his own account or whether someone called him to come and have a look at Mrs Djordjevic although he believes there was every chance he went by himself. His recall of events was often qualified with uncertainty. This is perhaps understandable given the statement was made in July 2009 without the benefit of hospital notes. He states however he saw her hitting her head.⁵⁴

155. As she was left unobserved for at least several minutes, the number of times Mrs Djordjevic banged her head on the ground cannot be determined. It is clear however from the injuries to her face and the observation of staff that it was numerous occasions and at times with force.

156. It is also undoubtedly the case Mrs Djordjevic was in great distress. The de brief minutes noted she was incontinent of faeces and urine prior to the second period of restraint in the seclusion room. Nurse Hemmings summed it up appropriately---

*"I don't know what happened in that time but something terrible had happened in that time"*⁵⁵.

157. HASA Radic and Palmer returned to the seclusion room and with the assistance of Nurses Wade and Janssen restrain Mrs Djordjevic who struggles violently throughout the entire restraint. Dr Inglis, the on call medical registrar attempted to examine her without success. Contact is made by phone with Dr Ediriweera at Shellharbour Mental Health Unit who advised an injection of olanzapine. Nurse Pretzler gave the injection at 8.55 am. She said Mrs Djordjevic was continuing to struggle and banging her head on the ground. She left and returned a short time later to find she wasn't moving. Although Nurse Wade⁵⁶ described the change as tapering off, others describe it as sudden⁵⁷.

158. The second restraint lasts for some 23 minutes, starting at 8.40 am and concluding at 9.03 when an arrest is called. The resuscitation team are

⁵² Palmer 22/09/2010 p8

⁵³ Pretzler 20/09/2010 p41

⁵⁴ Wade 20/09/2010 p105

⁵⁵ Hemmings 17/09/2010 p60

⁵⁶ Wade 20/09/2010 p110

⁵⁷ Janssen 21/09/2010 p26; Palmer 22/09/2010 p12

called and after some 19 minutes a heartbeat is obtained and Mrs Djordjevic is moved to the ICU.

The resuscitation

159. Dr Vinen concluded the intubation was within an acceptable time and does not identify any deficiencies in the resuscitation process save the poor record that made the sequence of events difficult to follow. It was described as one of the poorest examples of a resuscitation record keeping he had seen.
160. Dr Vinen said it was the usual and expected practice for all details of cardiac arrest management to be in a documented form. No such form was used in this case and its use more generally in the Hospital 2008 was described as patchy⁵⁸. It is noted a new resuscitation form and protocol for use is now in place.

The appropriateness of the prone restraint method

161. Mrs Djordjevic was held in the prone restraint throughout. Its use and the way it was carried out are of particular concern in this inquest. It was in 2008 the method of restraint taught to mental health staff in the LHN. A Local Health Network review dated 21 December 2010⁵⁹ has however recommended the prone restraint method be avoided if at all possible. Noting the recent change in approach, a consideration of the prone restraint method and how it was applied should nevertheless occur.
162. There was in the inquest a marked difference of opinion between Mr Biro, a nurse educator and aggression management trainer who advocates the prone (face down but to the side) method of restraint and Dr Vinen, an emergency medicine specialist, who advocates the supine (patient lying on back facing upright) method of restraint.
163. There is however common ground that the risk to a patient in using prone restraint is that it may lead to positional asphyxia. Dr Vinen described the mechanism leading to death as primarily due to hypoxia and hypercapnia as result of impaired respiration and oxygenation from an inability to breathe adequately (positional asphyxia) because of the restraint resulting in a cardiac arrest⁶⁰.

The arguments for prone restraint

164. Mr Biro's statement⁶¹ advanced a number of arguments in favour of prone restraint which are set out as follows –

a. The risk of spitting

165. Mr Biro said mental health staff were at a higher risk of spitting from a patient who may have contaminated blood because intravenous

⁵⁸ transcript 4/03/2011 p71

⁵⁹ recommendations folder ex 6 tab 3

⁶⁰ B.E vol tab 86

⁶¹ B.E vol 4 tab 99

medications can take longer to take effect than in an emergency department setting.

166. Dr Vinen made in my view the valid point these risks should be appropriately managed by preparation prior to commencing the restraint and ready availability of appropriate protective clothing such as gowns, masks and eye protection. He had been involved in the restraint and sedation of hundreds of patients, but is not aware of a single case where the patient or staff has come to significant harm where the patient was placed in the supine position. He has however been involved in the review of external cases of patients harmed that were placed in the prone position⁶².

167. Dr Vinen says the supine position may expose staff to saliva/blood due to spitting but this does not justify placing a patient at increased risk by restraining in a prone position where their colour, level of consciousness and respiratory function cannot be easily seen and monitored.

b. The vomiting patient and restraint

168. Mr Biro observed supine restraint is not appropriate for a vomiting patient. Dr Vinen agrees, noting the established practice of placing a patient neither prone nor supine but on their side.

c. The distinction between the mental health unit and emergency department

169. Mr Biro says the prone position is usually preferred in a mental health setting whilst supine is usually preferred in the emergency department, the rationale being the ability to rapidly medicate and apply cardiac monitoring in an emergency department.

170. Dr Vinen rejects this differentiation as “artificial and largely without foundation” as many if not majority of situations, members of the emergency department are part of a response team who participate in the restraint of patients in all areas of a Hospital. I consider it artificial to disregard the fact many mentally ill patients first presentation is at an emergency department. The location of a patient should not determine the manner of restraint.

171. The argument prone position is usually preferred in mental health units is at odds with the practice employed by Dr Parmegiani in two significantly sized mental health units at Wagga Wagga and Tamworth. As former medical superintendent for both units and responsible for the training of staff and development of policies including restraint of patients, it was his observed practice in 20 years of psychiatry that the supine position be used rather than the prone position. In his opinion it is a safer for the patient. He had never used nor seen in his units the facedown or prone position of restraint.

⁶² B.E vol 3 tab 86 p6

172. As for the issue of it being easier to quickly administer intramuscular medication in an aggressive patient in the prone position, Dr Parmegiani said it can be put in the quadriceps or shoulders in the supine position⁶³.

d. The airway and signs of cyanosis can be clearly monitored

173. Mr Biro says in the prone restraint position, the airway and signs of cyanosis can clearly be monitored by ensuring the client's head is turned to the side, allowing the person holding the head or arms to observe for signs of restricted breathing and cyanosis.

174. Dr Vinen counters that the ability to monitor and observe the patient adequately in the prone position is seriously compromised even in the best of circumstances. Evidence of the struggle by Mrs Djordjevic and as will be apparent, the failure to monitor her airway and look for signs of cyanosis (blue discolouration from a lack of oxygen) clearly demonstrates the difficulties prone restraint presents.

175. Dr Vinen said short of using an oxygen meter, assessment of oxygen levels of a struggling and highly agitated patient are very hard to determine. He made the telling observation by the time you can observe the blue colouring on a patient indicative of cyanosis, a significant level of hypoxia (a shortage of oxygen) has already occurred.⁶⁴

e. The avoidance of pressure on the torso

176. Mr Biro states the prone method course teaches no pressure is to be placed on the torso of a patient, Dr Vinen explained however when restraining in the prone position, force is transmitted to the thorax and compromises the respiratory function. In a similar vein are comments in an article by Dr Ball Medical Director of the Norfolk Mental Health Care National health Service that the force acting on the limbs is transmitted to the thorax rather like the pressures exerted by a guy-rope.⁶⁵

177. Regardless of what is taught in the course and indeed what is forbidden, in reality mistakes can occur. So much is evident from the failures in the restraint of Mrs Djordjevic set out below. It is not unrealistic to assume inadvertent pressure may be applied to a patient during a violent struggle. It is clear that considerable force has been used to try to restrain Mrs Djordjevic. Dr Parmegiani noted ---

“When you are in that position it is more likely that people will be stood on, pressure placed upon their chest, legs drawn up by their natural movements as they struggle.”⁶⁶

178. Dr Vinen also made the logical observation if those involved in the restraint become tired, the capacity to observe is reduced and the ability to use the proper restraint technique can be impaired.

⁶³ Parmegiani 22/09/2010 p69

⁶⁴ Vinen 28/2/2011 p32

⁶⁵ B.E vol5 tab 114

⁶⁶ Parmegiani 22/09/2010 p68

179. On the issue of mistakes, I have some difficulty with the logic of Mr Biro's statement that the prone restraint can lead to more mistakes but if the mistakes are not made it is just as safe as the supine method.⁶⁷

180. It is clear in my view that even without the recent LHN review recommending prone restraint be avoided if at all possible, the dangers of using prone restraint are manifest.

The essential prone restraint safeguards and what in fact happened

181. Despite the divergence of views, there is agreement on the essential things that should occur in using prone restraint.⁶⁸ The following is a summary with comment as to compliance in the restraint of Mrs Djordjevic.

a. A minimum number of staff involved in the restraint

182. A minimum of 5 persons was required. If there are insufficient numbers and there is a need to commence the restraint, Dr Vinen noted you always call for assistance. Each person is to perform a particular task, for example, holding the legs or arms or head.

183. I am satisfied there were 4 staff only performing the restraint, namely Nurse Janssen, Nurse Wade, HASAs Palmer and Radic. It is unclear from the conflicting accounts what role each was performing. Three of the four staff involved in the restraint had undertaken training and professional programs in restraint. Nurse Wade had only undertaken an orientation for aggression management. He had not received training since 1993 and was unaware of the term positional asphyxia.

184. Both experts considered having only 4 staff in the restraint as very dangerous. As Dr Vinen observed, who in those circumstances, stops the person from banging their head and who is watching the patient.

b. A person in charge of the restraint

185. This essential feature did not occur. Nurse Hemmings had authorised the restraint but was not in the room. Doctor Inglis was present for a short period and left to speak to a registrar on the phone after being unable to examine Mrs Djordjevic. Nurse Pretzler entered only to administer the olanzapine, left and returned just prior to the cardiac arrest. No one was in charge in the room. No one was talking to her and assessing to see if she was conscious.

c. Monitor breathing, movement and colour of the patient.

186. This is one of the most critical requirements to reduce the risk of positional asphyxia, yet no one was performing this role.

187. HASA Palmer said he was holding her arm and didn't see her face until she was turned over.⁶⁹ HASA Radic said although he could see her face, he was focused on her arm and not her face. Nurse Janssen's account that

⁶⁷ Biro 28/02/2011 p22

⁶⁸ Vinen and Biro 28/02/2011 p9-67

⁶⁹ Palmer 22/09/2010 p14

she was always at the feet meant she could not see the face or see if she was breathing⁷⁰. Nurse Wade's account is he was restraining the arm and could see more of her face when she turned towards him⁷¹. Even if this is accepted, he did not have a continuous view given, as he says, there were a series of changes in position.

188. The failure to monitor and assess is starkly demonstrated by the fact it was only through the fortuitous reappearance of Nurse Pretzler that caused the restraint to cease. When Nurse Pretzler returned, she saw she was not moving. She was still being restrained. Bending down to speak with her she placed her hand on her back and noticed she was not breathing. HASA Radic agreed she appeared to stop struggling but they kept restraining her in any event⁷².
189. Only Nurse Wade said he noticed she was not breathing. This is however at odds with all other accounts and when put to him it was Nurse Pretzler who had noticed it he said he was unsure.⁷³
190. The failure to monitor the breathing meant it was only when Mrs Djordjevic was turned over just before the call of a cardiac arrest that several staff noticed the signs of cyanosis. HASA's Palmer and Radic, Nurses Pretzler and Janssen all gave evidence of seeing her blue lips. Security Officer Deighan said in a security report that when he attempted to take over he noticed she was not breathing and was blue.⁷⁴ Dr Vinen's observation is worth repeating, namely by the time there are signs of cyanosis, a significant level of hypoxia (shortage of oxygen) has already occurred.

d. The head to be faced to the side and a person restraining the head

191. There is very strong evidence that no one was ensuring that the head was faced to the side and at times Mrs Djordjevic was face down.
192. Nurse Wade says her face was mostly to the side but at times she would change sides and face down.⁷⁵ Nurse Janssen says that when HASA staff brought her to the ground and commenced to restrain her on the floor she was facing down and not to the side.⁷⁶ Nurse Pretzler says when she went to give her the injection her face was to the side.
193. HASA Radic says her head was turned to the side so she could breathe and was not any time facing straight down, he could see her face the whole time and her head was braced so it wouldn't move.⁷⁷ I do not however accept this account. The assertion it was Nurse Janssen bracing the head is at odds with her evidence she stayed at the feet at all times. When

⁷⁰ Janssen 21/09/2010 p24

⁷¹ Wade 29/09/2010 p109

⁷² Radic 21/09/2010 p90

⁷³ Wade 20/09/2010 p110

⁷⁴ B.E vol 3 p631

⁷⁵ Wade 20/09/2010 p107

⁷⁶ Janssen 21/09/2010 p 25

⁷⁷ Radic 21/09/2010 p89

pressed in cross-examination, he was “fairly certain but not positive”. It is also at odds with his written statement that Nurse Jansen and Nurse Wade restrained the legs. Furthermore, Nurse Palmer stated he was holding the arm and did not see the face until she was turned over. He clearly was not holding the head. He said he was fairly sure Nurse Janssen was holding her head, but was unable to say if she was doing this the entire restraint.

194. The second aspect of HASA Radic’s account that Mrs Djordjevic’s head was braced so it wouldn’t move is also against the weight of other evidence that her head was banging on the floor during the restraint. Doctor Inglis saw her trying to move around and banging her head on the floor, facing to the side⁷⁸. Furthermore, when nurse Pretzler went to give the injection she was struggling and trying to bang her head on the ground, stating-- “*She was doing it hard. It wasn’t violent, it wasn’t soft but she was doing it harder than when I first saw her*”.⁷⁹
195. I am satisfied, contrary to this essential prone restraint requirement, no one was in fact holding her head and at times the head was face down.

The other risk factors in prone restraint

196. The numerous failures to comply with the essential requirements in prone restraint were compounded by other factors agreed by Mr Biro and Dr Vinen that increased the risk of positional asphyxia. They were—

- . A blanket was placed under her head increasing the risk of obstruction of the mouth and nose.
- . Obesity, which compromises the movement of the diaphragm.
- . The length of time of restraint—the longer the greater the risk. Dr Vinen described it as excessive and not appropriate.⁸⁰
- . Agitation, through pain—there is clear evidence of major burns to the oesophagus that increases oxygen demands. She was thrashing for the entire restraint.⁸¹ Agitation is also a sign of hypoxia.
- . Staff becoming fatigued—staff were sweating due to her high BMI and aggressiveness.⁸² The result is a reliance on force rather than technique.⁸³

Conclusion on issue 6.2

197. The failings to comply with the essential requirements for prone restraint were overwhelming. These failings, the risk factors and evidence of

⁷⁸ Inglis 15/09/2010 p11

⁷⁹ Pretzler 20/09/2010 p46

⁸⁰ Vinen 28/02/2011 p46

⁸¹ Janssen 21/09/2010 p26

⁸² B.E vol 3 tab 75 Debrief notes

⁸³ Biro 28/02/2011 p37

cyanosis provide very strong evidence to find as suggested by Dr Vinen that Mrs Djordjevic sustained positional asphyxia as a result of the restraint.

Issue 6.3. Whether prone restraint should continue

198. Since the death of Mrs Djordjevic, the LHN undertook a review of the Management of Aggression program and in particular the method of prone restraint taught to mental health staff. The report dated 21 December 2010 found the prone restraint method used in this case was taught in many of the area health services within New South Wales. It concluded however-

“It is perilous to place a person in a face down prone position but accepted that there were occasions when it is necessary to do so noting the longer a patient was held in a face down position the more treacherous the restraint became”.

199. The review has recommended that the course program contain the following –

*“The prone restraint position should be avoided if at all possible and the period that someone is restrained in the prone position needs to be minimised. Whenever a patient is held face down in the prone restraint position the maximum period of continuous restraint should not exceed 3 minutes”.*⁸⁴

200. The proposed time limit was to minimise what was found to be “the overwhelmingly documented patient safety risks”.

201. There is no apparent logical medical reason for a different method of restraint taught or practiced as between a mental health unit and an emergency department. Nor is there any logical basis for a variety of methods applied as between different area health networks within New South Wales. To do so invites confusion by staff and with the movement of staff around the State could place patient safety at risk.

202. The LHN has delivered strong recommendations that prone restraint be avoided if at all possible. Support for this view comes from 2 highly experienced practitioners, Dr Parmegiani in psychiatry and Dr Vinen in emergency medicine.

Conclusion on issue 6.3

203. The arguments favouring prone restraint have been comprehensively answered and rebutted in this inquest. The risks to the patient have been clearly demonstrated. Despite the precautions said to be taught to staff in using prone restraint, the failings in Mrs Djordjevic’s restraint were glaring, fundamental and ultimately fatal.

204. I am of the view that the NSW Department of Health should consider a statewide review of the method of restraint used across all Hospital departments and further consider the introduction of a statewide policy that prone restraint be avoided if at all possible. Although not parties to the

⁸⁴ B.E recommendations folder tab3

inquest, a copy of these findings should also be forwarded for the information of Royal College for Emergency Medicine and the Royal Australian and New Zealand College of Psychiatrists, as their disciplines are more likely to deal with issues of restraint of patients.

Issue 6.4. Medication given without psychiatric input

205. As indicated above, a resident medical officer was called to review Mrs Djordjevic in the morning of 10 May after nursing staff noticed an increase in temperature. The doctor consulted an obstetrics and gynaecology registrar. The plan was to introduce antibiotics and dostinex to suppress lactation. The same doctor reviewed Mrs Djordjevic at 4.20 pm on 10 May, reviewed the blood tests and x-ray and changed the medication adding augmentin instead of cephalex and adding azithromycin.
206. There was no consultation by the medical officer with any psychiatric medical officer about the medication plan and importantly, whether the medications were compatible with the anti-psychotic medications.
207. The giving of dostinex on 10 May highlights the potential danger of prescribing medication without relevant psychiatric input. Professor Starmer, pharmacologist noted the combination of dostinex and clozapine may reduce the effectiveness of clozapine⁸⁵. Dr Parmegiani noted one of the potential adverse effects of this medication as documented in the MIMS Annual is aggression and in particular “psychotic disorder”. He said –
*“I cannot exclude that the stress of an acute infection and possibly the administration of a dopaminergic drug (Dostinex) may have further contributed to her psychotic symptoms”.*⁸⁶
208. There is a conflict in the evidence as to when the dostinex was administered by Nurse Pretzler .The medication chart⁸⁷ records the time as 12.50 pm which would be after the first episode of catatonia. There is however other evidence to support the far more likely conclusion it was administered much earlier that morning.
209. The notes by the registrar who directed the medication plan are timed at 9 am. The dostinex was to be administered “stat”, that is immediately. The other medications ordered were administered at 9.30 am. The notes by Nurse Pretzler record the dostinex being given and then the attendance at x-ray and the catatonia episode. Curiously, those notes are timed at 12.40 pm which is before the dostinex was purportedly given at 12.50 pm. I am satisfied the dostinex was administered shortly before the first period of catatonia.
210. The timing of the administration of the dostinex that can have an adverse effect of psychotic disorder, and the development of Mrs Djordjevic’s

⁸⁵ B.E vol3 tab 87 p1044

⁸⁶ B.E vol2 tab 59 p614

⁸⁷ Hospital records p226

catatonia clearly remains a possible contributing factor in the sudden decline in her mental health.

211. Conclusion on issue 6.4

It is reasonable to assume that decisions by medical registrars on medication compatibility for patients taking anti psychotic medication would first involve consultation with staff with psychiatric expertise. Surprisingly, this did not occur. It is noted the LHN now has a policy that all medication plans by medical officers must be made with the input of psychiatric trained medical officers.

Issue 6.5. The extent of psychiatric medical input into the decision to seclude, restrain and medicate.

212. Although Mrs Djordjevic was exhibiting unexpected and uncharacteristic highly agitated behaviour, no attempt was made to seek medical psychiatric input in the first restraint and in the decision to place her in seclusion. It was only when she was seen banging her head on the ground that contact was made with the on call medical officer, Dr Inglis, to attend and telephone contact made with the on call psychiatric registrar Dr Ediriweera who was at Shellharbour Mental Health Unit.

213. Discussion between the two doctors led to the administration of the olanzapine at 8.55am. Some 45 minutes had elapsed from the administration of maxalon at 8.10 am. Dealing with the period up to the time of the first restraint, Dr Parmegiani said—

*“With the knowledge of what happened through the night and her state in the morning, I would have chosen to give her sedation earlier than it was given”.*⁸⁸

214. Although Dr Parmegiani observed other clinicians might differ in this decision, there was no attempt to obtain any expert psychiatric input at the first restraint or at the time of the seclusion to at least allow for a decision.

215. Dr Parmegiani further noted that he definitely would have recommended some form of sedation earlier than the time she developed the overtly aggressive behaviour.⁸⁹

216. The type of medication when given is also of concern. Dr Ediriweera told Dr Inglis the only option available was olanzapine. It is unclear why this view was taken as nothing in the sedation protocol forbids it. Dr Vinen agreed it might have been because of an apparent overlay with respect to psychosis behavioural symptoms, but said if you are going to sedate someone you might give another more sedating drug such as midazolam or diazepam.⁹⁰

⁸⁸ Parmegiani 22/09/2010 p54

⁸⁹ Parmegiani 22/09/2010 p60

⁹⁰ Vinen 28/02/2011 p 61

Dr Inglis

217. Dr Inglis was placed in an invidious situation. She attended as on call medical officer. A second year intern with no specific mental health or restraint training and no knowledge of emergency sedation protocol, she was presented with a highly agitated patient attempting self-harm. Apart from an unsuccessful attempt to examine her, she was occupied reading the file and speaking with Dr Ediriweera at Shellharbour Hospital. It is reasonable that she would not have the expertise to decide on the type of sedation required. Further, the evidence does not support any conclusion that in fact Dr Ediriweera relayed to Dr Inglis over the phone an obligation to stay with the patient after the injection.

218. The question arises whether Dr Inglis, without the appropriate training, should have been placed in that difficult position in the first place. 11 May 2008 was a Sunday. There were no psychiatric registrars on duty at Wollongong Hospital. There was 24 hour duty psychiatric registrar coverage at Shellharbour. Although it cannot be said the outcome would ultimately have changed, had Mrs Djordjevic been transferred to Shellharbour at the time of her admission, there would have been immediate access to a psychiatric registrar who could arguably have seen first hand the extent of the agitation displayed and been involved in decisions on restraint, seclusion and early sedation. Valuable time was lost in the 2 doctors discussing her condition over the phone.

219. Conclusion on issue 6.5

There was no effective medical psychiatric input into the decision to restrain or seclude. The LHN now has a system of on call psychiatric consultants as well as duty psychiatric registrars.

Issue 7. Was there a rewriting of the mental health unit notes?

220. Nurse Hemmings contacted the officer in charge a matter of days before the inquest began to allege the clinical notes for the morning of 11 May had been altered. She said after the arrest of Mrs Djordjevic and transfer to intensive care, Nurse Jansen offered to write up the nursing notes. When looking at the notes she was disappointed to see a less than comprehensive account of events of about a half page in length that did not include any of the chronology of events Nurse Hemmings had jotted down on a piece of paper and provided to Nurse Janssen.

221. Prior to the inquest, Nurse Hemmings asked to look at the notes. She says she immediately realised they had been changed. There were now 2 pages of notes by Nurse Janssen and Nurse Whitmore's notes had also been altered from 1 line to 4 or 5 lines. Nurse Hemmings is unable to describe the contents of the original notes. She does not suggest removal of incriminating or damning evidence of a lack of care provided, but rather, objectively there was a rewriting and substitution of the original notes.

222. Nurse Hemmings rejected the suggestion she has mistakenly referred to an earlier entry of a similar length the day before, stating she turned to the last page where it becomes blank. On one view, it would be unusual that Nurse

Hemmings has, when intending to read the latest entries about clearly an exceptional event, failed to go to the last entry and read an earlier entry in error. Strong caution must however be exercised in asking the inviting question why would Nurse Hemmings raise this issue if it were not true. It is the case that witnesses may hold an honest but mistaken recollection of events.

223. Nurse Whitmore rejected the suggestion there was any alteration of the notes. Nurse Janssen said she has never rewritten notes and would signify extra notes by the term "addit". There was however this curious exchange⁹¹

Counsel assisting: And is it possible that in fact the timing was that you did write a half page of notes and then you subsequently looked at the note and thought you should put more information in and you re-wrote the note more fully?

Nurse Janssen: I don't believe so. No.

Counsel assisting: Can you be sure that you didn't?

Nurse Janssen: No, I can't be sure.

Conclusion on issue 7

Although an apparent lack of ability to be sure may seem at odds with Nurse Janssen's statement she has never rewritten notes, I am unable to conclude on the state of the evidence the notes were altered.

ISSUE 8. WHY THE SAMPLE WAS NOT ANALYSED.

224. Nurse Hemmings later recovered one of the bags of vomit, which was initially sent to the Wollongong Hospital Chemistry Department on 12 May 2008 for analysis. The tests sought were PH, chemical analysis and drug screen.

225. The sample could not be introduced to the Hospital's testing equipment and was sent to the Royal Prince Alfred Hospital Biochemistry Department. The sample was again not analysed. A report issued on 15 May 2008 from RPA to the SEALS Wollongong Hospital was that testing was not performed because it is not available for body fluid samples. No explanation was given why it was not suitable. It advised the sample would be kept for 2 weeks and then discarded. SEALS appropriately sent a report to a doctor at Wollongong on 16 May advising the sample could not be tested⁹². It was ultimately discarded in September 2008.

226. It is clear from the evidence of Mr Winder that tests exist for PH levels to determine whether an acidic or alkaline substance had been swallowed and many other tests for fluoride and a variety of chemicals. As a matter of commonsense, even a basic dipstick could have been used to determine the PH level.

⁹¹ transcript 21/09/2010 p 12

⁹² B.E vol 3tab61c

227. I do not consider there was any systemic failing in the Hospital process or the police investigation concerning the sample. Officer Maloney, who was first at the scene sought the collected vomit, was told it was forwarded for analysis and in turn advised Detectives who took over the investigation. Detective Stewart then requested a copy of the pathology report⁹³. It is not unreasonable to assume the analysis would be carried out and received.

Conclusion re issue 8

228. The experts are divided on whether it was an acid, alkali or neither. Although no systemic failings occurred, it remains the case that a golden opportunity was lost to determine what was swallowed when the vomit sample was discarded.

Issue 9. What was swallowed and what was the cause of death.

229. A number of possible explanations for the burns and cardiac arrest have been investigated. Experts are divided as to the cause, with one exception. There is no dispute with the opinion of expert cardiologist Professor Adams, that there was no evidence of a pre-existing cardiac condition that might have contributed to a cardiac condition and it was extremely unlikely any of the medications contributed to her cardiac function.

230. The possible explanations for the burns and cardiac arrest are in summary--

- a. Cardiac arrest from cerebral oedema.
- b. Cerebral oedema from water ingestion.
- c. Cerebral oedema from chlorhexidine ingestion.
- c. Ingestion of a corrosive substance such as an acid or alkali
- d. Ingestion of toothpaste
- e. A systemic illness absent any corrosive substance ingestion
- f. Positional asphyxia from the restraint together with ingestion of a substance

a. Cardiac arrest from cerebral oedema

231. A cerebral oedema was evident on the MRI scan at 11.08 am, about two hours after the arrest. The post mortem likewise showed evidence of cerebral oedema. The question is whether it was from hypoxic brain damage after the cardiac arrest or whether it was a primary event that in turn led to the cardiac arrest.

232. Dr Purdon, head of the intensive care unit at Wollongong Hospital and Mrs Djordjevic's treating doctor upon her admission to the unit, considered she lost consciousness as her brain was swollen from something ingested. The brain became compressed which led to a cardio- respiratory arrest. He considered it probably was a surgical hand wash, Chlorhexidine that was widely available within the hospital.

233. Dr Purdon said a cerebral oedema is something that evolves over time and he would not expect to see it within about two hours of a cardiac arrest but

⁹³ B.E statement vol1 tab 11

rather somewhere between 8 to 12 hours. He considered the ingestion of the substance to be at least this period prior to the arrest.⁹⁴

234. Dr Vinen and Professor Adams gave concurrent evidence, the effect of which was to exclude cerebral oedema as arising from the ingestion of a substance. Dr Vinen said he had seen cerebral oedema appearing on a CT scan within a couple of hours of a cardiac arrest and the extent of cerebral oedema depends on the severity of the insult to the brain. In this case, the loss of circulation of 20 to 25 minutes after the arrest would in his view be consistent with an insult to the brain of some severity.⁹⁵
235. Both experts considered the MRI scan on 14 May as much more in keeping with hypoxic brain damage due to a cardiac arrest rather than a primary cerebral oedema problem.⁹⁶ They made the telling and in my view important observation that for a cerebral oedema to cause a cardiac arrest, the patient would be expected to have severe neurological disturbances and in this case, Mrs Djordjevic was awake, struggling and agitated. To go from that to a cardiac arrest was considered “pretty unusual.”⁹⁷
236. Dr Vinen noted the initial CT scan of the cerebral oedema was only mild and not consistent with brain stem compression induced cardiac arrest, noting that every patient he had seen who developed respiratory arrest and/or cardiac problems due to a cerebral oedema had been deeply unconscious.⁹⁸
237. The joint evidence of the experts is logical and persuasive, particularly that dealing with the expected neurological disturbances. Their evidence and the sequence of events including the restraint and evidence of hypoxia is such that I am satisfied the cerebral oedema was subsequent to the arrest.

b. cerebral oedema from water intoxication

238. Professor Winder, toxicologist, explained cerebral oedema can be caused by consuming large quantities of water. He noted Mrs Djordjevic had been seen drinking copious amounts of water preceding the arrest. Reliance was placed on the sodium readings prior to and after the arrest supporting the diagnosis of hyponatremia and thus the consumption of large quantities of water.
239. Professor Adams made the important observation that it was pretty hard to be certain what the sodium level was at 7 a.m. on the morning of the arrest. The reading closest in time to the arrest was at 9:40 a.m. (i.e. after the arrest). Neither Doctor Vinen nor Professor Adams considered the results were suggestive of severe hyponatremia. Professor Adams considered that had ingested water caused the oedema, a much lower sodium level, maybe

⁹⁴ Purdon 16/09/2010 p9

⁹⁵ Vinen 28/02/2011 p73

⁹⁶ Vinen and Adams 28/02/2011 p 83

⁹⁷ Adams 28/02/2011 p 90/91

⁹⁸ Vinen 28/02/2011 p90,96

around 115 would be expected⁹⁹. The lowest reading was 129 after the arrest.

240. The opinion of both Dr Vinen and Professor Adams, against their field of expertise is persuasive. The levels recorded are not markedly low and must be seen in light of the cardiac arrest and a significant period before resuscitation. Although the results do indicate some level of hyponatremia, they do not support the conclusion that water indigestion had caused the oedema.

c. cerebral oedema and ingestion of chlorhexidine

241. The ingestion of an antiseptic hand rub, chlorhexidine as the corrosive agent and responsible for the cerebral oedema was raised by Dr Purdon during the inquest. He said it was readily available around the hospital as part of a roll out and would explain the very unusual presence of .01% alcohol in the blood sample taken on 12 May.
242. The Hospital kept supplies of pink coloured Avagard chlorhexidine 0.5% in 70 % alcohol. Although being rolled out through the hospital, according to Mr O'Hanlon, the solution was not and is still not available to patients on the ward. The dispensing units are held in the swipe access nurses station and similar access store room.¹⁰⁰
243. Although it is not possible on the state of the evidence to find Mrs Djordjevic had access to chlorhexidine on the ward, the fact remains she must have ingested some substance containing alcohol prior to the arrest, there being no evidence any such substance was administered as part of resuscitation.
244. The amount of alcohol in her blood at the time of arrest cannot be realistically determined. Professor Starmer, expert pharmacologist said whilst the alcohol level 24 hours previously would probably have been higher than .01% given evidence of liver damage seen at post mortem, he would not attempt to put a figure on it.¹⁰¹
245. According to Professor Winder, toxicologist, chlorhexidine would not be capable of causing the damage seen at post mortem. Interestingly though, Professor Starmer referred to one identified case of liver damage, pharyngeal oedema and necrotic changes of the oesophagus after a very significant ingestion of chlorhexidine. The amount in that case was about 30 gms, which would involve about 6 litres of solution.
246. There is in summary insufficient evidence to find chlorhexidine was in fact consumed and for the reasons outlined above, no basis to find it caused the oedema. The unanswered question remains how Mrs Djordjevic, a patient on a secure ward with an apparent protocol of checking patients for items should they leave the ward and return, could have had access to a substance containing alcohol.

⁹⁹ Adams 28/02/2011 p77

¹⁰⁰ O'Hanlon –nurse in charge mental health ward -3 /03/2011 p2

¹⁰¹ Starmer 3/03/2011 p55

d. Ingestion of a corrosive substance such as an acid or alkali

247. The experts are agreed that a substance was swallowed, but disagree as to the type and whether the substance caused the cardiac arrest.
248. Apart from staff observations of bruising to the eye and nose, bleeding from the nose, redness and excoriation round the corners of Mrs Djordjevic's mouth were seen by Nurse Pretzler when they called the cardiac arrest.¹⁰² Burn marks on the face and chest were observed at ICU, as was a thickened and very unusual appearance of the oesophagus on the CT scan.
249. At autopsy, the chemical burns were noted as was extensive hyperaemia and ulceration with sloughing of the mucosa of the entire oesophagus; extensive hyperaemia, sloughing of mucosa and oedema of the stomach. Microscopic examination showed extensive deep mucosal ulceration of the oesophagus with pseudomembrane formation consistent with ingestion of caustic material. No obvious pathology was seen in the stomach apart from good preservation of the mucosa and some haemorrhage into the wall¹⁰³.
250. Dr Purdon, ICU Wollongong, raised the possibility the burns were from gastric acid reflux. There is very strong evidence however to conclude the burns at the very least to the oesophagus and stomach was not from gastric acid.
251. Dr DuFlou, forensic pathologist, considered damage in terms of haemorrhagic changes on microscopic and macroscopic examination was not those from gastric acid reflux.¹⁰⁴ Professor Goulston, expert gastroenterologist, similarly agreed although his opinion the burns were absolutely not those of gastric acid reflux extended not only to the stomach/oesophagus but the burns seen on the face and chest.¹⁰⁵ Dr DuFlou and Dr Vinen had both seen similar facial burns from vomiting of stomach contents containing hydrochloric acid.
252. Dr DuFlou's initial view was the features observed were the consequence of ingestion and subsequent regurgitation/vomiting of a substance probably with a high ph i.e. an alkaline substance. His revised opinion is the ingestion of toothpaste and subsequent creation of hydrofluoric acid within the stomach.
253. The view it was likely an alkaline substance was responsible for the burns was shared by a number of experts. Professor Winder stated there is no doubt she swallowed something caustic at some point on the morning of 11 May 2008, and the type of burns are more likely to be caused by contact with a strong alkali where redness and skin sloughing than with a strong acid where blistering is more common.¹⁰⁶ His revised opinion that it might

¹⁰² Pretzler 20/09/2010 p51

¹⁰³ Post mortem vol 1 p6

¹⁰⁴ DuFlou 4/03/2011 p34

¹⁰⁵ Goulston 3/03/2011 p 8

¹⁰⁶ B.E vol p1059

be an acid as no identified alkaline substance has been located is discussed below.

254. Professor Goulston, noting the very severe damage to the oesophagus relative to the stomach said it is well known in gastrology that caustic alkaline fluids with a high pH damage the oesophagus more than the stomach.¹⁰⁷ Dr Vinen, noting over 30 years in the emergency department having seen people ingest almost anything, considered it certainly consistent with an alkaline caustic ingestion that classically cause the oesophageal damage seen.¹⁰⁸
255. The counter to this expert opinion comes from Dr DuFlou. He had no doubt the substance ingested was highly corrosive, however he considered the good preservation of the stomach mucosal cells were markedly different to what would be seen in the case of hydrochloric acid or sodium hydroxide ingestion¹⁰⁹.
256. The possibility it was an acid came principally from a scenario in a revised opinion by Professor Winder, relying upon blood chemistry results showing a pH 6.9, the range being 7.3 to 7.43. The reading however is at 9:40 a.m., some 40 minutes after the arrest. Dr Vinen viewed it as indicative of severe metabolic acidosis whilst the Professor Adams does not place much weight on it, as the amount of caustic substance to be ingested to derange the systemic system would be enormous.¹¹⁰ Dr DuFlou similarly would not attach any significance to it. Against those observations, I am unable to find that it was in fact an acid.
257. Although there are arguably strong indicators from a number of experts to support the view it was an alkaline substance, in light Dr DuFlou's evidence, I am unable to conclude on balance it was an alkaline substance. The evidence however enables me to conclude it was a caustic substance. Given the evidence of alcohol in the blood results, it is possible the substance had alcohol in it or there were two ingestions of different substances.

258. The source of the substance

The question arises as to the possible source of the caustic substance. An extensive investigation centred on the available substances on the mental health ward. Products initially identified by the Hospital available for staff were—

- . Vanish JF—toilet cleaner
- . Glance ---glass and multi surface cleaner
- . Goodsense---air freshener
- . Stride---floor /hard surface cleaner

¹⁰⁷ Goulston 3/03/2011 p9

¹⁰⁸ Vinen 28/02/2011 p95

¹⁰⁹ DuFlou 4/03/2011 p37, 39

¹¹⁰ Adams 28/02/2011 p 81

259. Mr Farrar, forensic toxicologist and Professor Winder, toxicologist, both concluded the only product capable of causing the burns seen at post mortem was Vanish JF (containing 53% phosphoric acid) in an undiluted form. It is delivered to the Hospital in an undiluted form and stored with other cleaning products in a swipe access cleaning point room, located in a corridor off the main ward that is accessible through swipe access double doors from the ward.
260. Within the cleaning point room was a wall mounted dispensing system. Staff would refill smaller containers of cleaning liquid by turning on a water tap. Water and a regulated amount of the undiluted product draw up and pass into the refill bottle. Undiluted chemicals could not be dispensed in a pure form using this system.¹¹¹ There is no evidence of an audit as to the products held in the cleaning point on 9 and 10 May, nor was there any documentation/checklist to be completed when taking cleaning products to the ward.
261. There was a morning and afternoon clean of the ward, the larger morning involving a locking of the ward excluding the patients except those who remained in their beds. The HASA staff would use individual trolleys containing cleaning products, toilet paper etc. The morning clean had not started at the time Mrs Djordjevic had started to vomit. HASA Palmer said he took a trolley onto the ward about that time but was only restocking toilet paper and towels. He, along with HASA Jouennet, said the trolley would come into the room with them when doing the morning clean.
262. Two aspects of the system for cleaning and security of the cleaning products arise. Nursing unit manager O'Hanlon said it was the policy that HASA staff stay with their trolleys at all times¹¹² and evidence from HASA staff was that the double doors leading from the ward to a corridor which included the cleaning point room would remain closed. The CCTV footage within the ward for 10 and 11 May suggests there were at least occasions when the doors were left open for significant periods of time and trolleys left in the corridors unattended.
263. Although the CCTV vision is on the face of it disconcerting, for Mrs Djordjevic to have obtained undiluted vanish JF would have required her accessing double doors when open and also accessing an open cleaning point room. Absent CCTV vision and other evidence, a finding cannot be made on balance that undiluted Vanish JF was accessed within the ward and ingested.
264. A further substance occasionally used on the ward later disclosed by the Hospital is Diversol 5000 bleach, used to clean a room of an infectious patient. The practice was for staff to obtain a sachet of bleach from another ward and mix it with water in the cleaning point room. Professor Winder does not consider this substance could have caused the burns.

¹¹¹ e-mail from Mr Howell, Johnson Diversey ,chemical distributors vol 5 tab 137

¹¹² O'Hanlon 21/09/2010 p56

265. There is no evidence to suggest, nor is it plausible, that Mrs Djordjevic has at the time of her admission to the birthing unit and before the relapse of her mental illness, brought with her a caustic substance that was retained after admission to the mental health unit. Nor is there any indication from the evidence Mr Djordjevic who went out with her on the evening of 9 May that she went other than back to the ward. The plausible explanation is that she has found some substance in the Hospital, either within the ward or in the Hospital more generally to which she had access when visiting the baby. The level of searching of a patient on return appears to depend on the risk assessment of the patient. Nurse Pretzler indicated that it may have involved asking her if she had anything with her.¹¹³ The timing of the agitation, vomiting and observation of the burns supports the conclusion it was ingested on the ward.
266. The search carried out on the ward by Nurse Gouvas and HASA staff did not commence until about 3.30 pm. She searched throughout the ward including checking various bins. A bottle of vanish JF was found in the staff kitchen, which is not accessible to patients. Although staff that conducted searches were of the view no caustic substance was available to be ingested, they were looking specifically for a cleaning fluid type container rather than something like a shampoo bottle or sachet. The timing of the search meant it was possible some bins were emptied prior to the search. The possibility remains the substance was ingested and disposed of in the ward.

e. Ingestion of toothpaste

267. Toothpaste contains fluoride that reacts with hydrochloric acid in the stomach to potentially create corrosive hydrofluoric acid that Dr DuFlou considers capable of causing the burns seen in the oesophagus and stomach.
268. The possibility the substance was toothpaste came from discussions with a forensic pathologist colleague, Dr Irvine, who found in a post mortem conducted in the United States a major cause of death of a male was ingestion of toothpaste. 230 gms of toothpaste were found in the stomach. Empty packets were found in his home. There was no evidence the male had vomited. There was dramatic and florid haemorrhagic necrosis of the gastric mucosa. Fluoride levels could not be determined nor the toxic dose as there were contributing co-morbidities of heart disease and cocaine intoxication. Dr Irvine considered the microscopic tissue examination in both cases to be consistent and there was no question even minute amounts of sodium fluoride will cause inflammation of the stomach.¹¹⁴ As with Dr DuFlou, a distinction was drawn between a fatal level of fluoride and that causing gastric inflammation.

¹¹³ Pretzler 20/09/2010 p 28

¹¹⁴ Irvine 28/02/2011 p104-109

269. Dr DuFlou considered a number of factors supported the toothpaste explanation ---

. The case conducted by Dr Irvine and similarities in microscopic analysis of the stomach.

. The preservation qualities of fluoride (used as a preservative for blood specimens) that stops metabolic activity of the specimen. This would explain the finding of good preservation of the mucosa, viewed as the critical aspect of pathology in this case.¹¹⁵ He had absolutely no doubt that a highly corrosive substance had been ingested. There was a very abnormal looking stomach macroscopically but an almost inexplicable lack of autolysis/deterioration of the cells within the stomach--potentially they had been preserved.¹¹⁶

. The research articles demonstrating an established link between the application of fluoride gel and the consequent erosions in the gastric mucosa, noting the very small quantity of fluoride required to cause identified gastric mucosal injuries.¹¹⁷

. The absence of a realistic explanation for the injuries considering the apparent lack of substances available on the mental health ward capable of causing the injuries combined with his view the damage seen was not consistent with either hydrochloric acid or sodium hydroxide ingestion.¹¹⁸

270. Given the damage identified, Dr DuFlou would not find it surprising for someone to die as a result of this alone noting severe localised tissue trauma can cause dramatic changes to the bodies biochemistry producing a cardiac arrest.¹¹⁹

271. Two toxicologists do not however support the toothpaste scenario. Noting the minimum lethal dose is 2.2 gms representing about 16 tubes of toothpaste, Mr Farrar said it was most unlikely toothpaste would cause the haemorrhagic effects seen.¹²⁰ Mr Farrar's assertion that buffering capacity eg silicate, found in toothpaste should neutralize any hydrofluoric acidic effects is however challenged by Dr Irvine who, with Dr DuFlou, also refutes the suggestion by Mr Farrar that cocaine intoxication found in her case in America would produce the stomach damage noted at post mortem.

272. Professor Winder says swallowing one tube containing 25% sodium fluoride amounts to .4 gm of sodium fluoride being less than the certainly lethal dose of 5-19 gms. A stomach holding 500 ml (a figure challenged by Dr DuFlou) would produce .45% concentration of HFL acid that is viewed as

¹¹⁵ DuFlou 4/03/2011 p 40

¹¹⁶ DuFlou 4/03/201 p37

¹¹⁷ Studies of Human Gastric Mucosa after application of .42% Fluoride Gel vol 4 tab 100

¹¹⁸ DuFlou 4/03/2011 p50

¹¹⁹ DuFlou 4/03/2011 p18

¹²⁰ B.E vol 3 p896

markedly less than the 20-25% concentration required to cause the burns within several hours of exposure. To cause the damage from toothpaste was viewed by Professor Winder as not within the bounds of possibility.¹²¹

273. Regard also must be had to the following—

- . Unlike Dr Irvine's case, there is no toothpaste found in the stomach at post mortem, nor empty toothpaste containers.

- . There is no evidence of access to other patients' toothpaste or her holding an unusual number beyond her normal needs. This is relevant given Dr DuFlou's view that to cause the damage seen would have to be at least a few tubes.¹²²

- . Although things can be missed, staff did not notice a minty odour in the vomit.

- . The original blood test results indicating excessive fluoride levels are in light of a review of the testing methodology, no longer reliable.

- . The blood tests did not show hypocalcemia that can, although not always, occur in significant fluoride ingestion.

- . There is some uncertainty why if the preservation qualities of fluoride operate in preserving the stomach mucosa it would not have similarly operated in the oesophagus. It may be however as noted by Dr DuFlou that different parts of the body cells will react differently.

274. Against these factors, I am unable to find on balance ingestion of toothpaste was the cause of the burns and arrest. Whilst at first glance, a scenario involving toothpaste seems bizarre, the observations at post mortem, conclusions reached in the case by Dr Irvine and the firm opinion of Dr DuFlou, a highly experienced forensic pathologist, should not be lightly dismissed. Warnings about the dangers of toothpaste appear on tubes in particular in the United States. There are according to Dr Irvine some 20,000 cases of exposures to toothpaste with fluoride reported yearly in the United States¹²³. Research has shown a compelling link between fluoride and damage to the gastric mucosa¹²⁴. The evidence of Dr Irvine and Dr DuFlou certainly warrants referral of the issue about the potential dangers of fluoride ingestion to the Department of Health for their consideration.

f. A systemic illness absent any corrosive ingestion

275. Noting that Mrs Djordjevic had a raised temperature and white cell count indicative of some inflammation or infection, cross examination of the experts by the LHN raised the possibility the damage to the oesophagus

¹²¹ B.E vol Tab 88

¹²² DuFlou 4/03/2011 p 65

¹²³ report of Dr Irvine vol3 p669

¹²⁴ see footnote 116

and stomach was from a systemic illness producing pseudo-membranous esophagitis.

276. Professor Adams considered this scenario less likely given the other evidence of the ingestion of a caustic substance; the findings were perfectly consistent with the ingestion of a material although she may have had a systemic illness somewhere else and if there was an infection problem of such severity, he said perhaps something might have shown up on the post-mortem. Doctor Vinen considered the mechanism of pseudo-membrane formation as classically found on histological examination associated with a caustic ingestion.¹²⁵
277. Relevantly, expert gastroenterologist Professor Goulston had never seen pseudo-membrane formation in a systemic or infected illness. Acknowledging idiopathic pseudo-membrane esophagitis is rarely reported in the literature, he considered the abnormal blood results consistent with severe burns to the body. High CK and myoglobin levels would not be expected in an infective process although the levels could be from muscle damage during resuscitation. He had seen patients who ingested caustic substances with severe damage to the oesophagus but no damage to the oral mucosa. His view was “overwhelmingly it was the ingestion of some caustic substance rather than any systemic infection”.¹²⁶
278. Finally, Dr DuFlou saw no evidence of infection in the microscopic examination; the appearances were very much those of ingestion of a substance and not bacterial or viral infection and the abnormal blood results could be explained by the cardiac arrest.¹²⁷
279. I consider the expert evidence very persuasive. I am satisfied on balance the damage was from ingestion of a corrosive substance and not from a systemic illness.

g. Positional asphyxia from restraint together with ingestion of a corrosive substance.

280. A caustic substance has been ingested .The issue arises whether the arrest was from the burns themselves, from the restraint or some combination of both.
281. Dr DuFlou said given the damage observed, it would not be surprising if death were the result of these changes alone. The severe localised tissue trauma can cause dramatic changes to the body’s biochemistry (metabolic derangement) that can cause a cardiac arrest.¹²⁸ .
- 282.** Balanced against this opinion are the views of Dr Vinen and Professor Adams, the latter noting the severity of findings at post mortem meant it was incredibly distressing and intensely painful for Mrs Djordjevic. Although

¹²⁵ Adams and Vinen 28/02/2011 p101

¹²⁶ Goulston 3/03/2011 p 19

¹²⁷ DuFlou 4/03/2011 p58,60

¹²⁸ DuFlou 4/03/2011 p18

a possibility, looking at the literature and cases of acute death from ingestion of substances, in his view it really didn't fit with this particular case. He considered an enormous amount of caustic material is needed to derange the systemic system whereas not much is needed to cause significant damage to the stomach or oesophagus¹²⁹. Dr Vinen was of a similar view noting persons do not tend to ingest large amounts to cause the metabolic disturbance due to the pain and irritation. He considered metabolic derangement entirely consistent with a post cardiac arrest¹³⁰.

- 283.** Professor Adams also considered whether aspiration as a direct cause was possible but considered it was more probable it was an asphyxia case.¹³¹ Dr Vinen indicated in over 30 years in the emergency department, having seen with few exceptions, every type of toxic poison case, none of those he saw suffered a cardiac arrest. Some died of necrosis some days or a week later.
- 284.** Although Dr Vinen says there was some contribution to the arrest from the ingestion of the substance, he identifies, in my view, a number of compelling factors in concluding the direct cause was positional asphyxia. The sequence of events, findings, CT scan, MRI, chest x-ray, ECG, blood rhythm results, lack of pre-existing cardiac disease, the absence of medications being a contributing factor, the position of the restraint, duration and signs of cyanosis all are consistent with the mechanism of asphyxia.¹³² As he plausibly observed, given the way prone restraint can place pressure on the thorax, there would not be an expectation of seeing bruising around the neck from the restraint process as might otherwise be seen in a strangulation.¹³³

Conclusion on issue 9

- 285.** Mrs Djordjevic swallowed a caustic substance in the mental health unit. Despite exhaustive efforts, the identity of the substance cannot be determined, nor how or where it was accessed within the Hospital. I do not believe however that any amendment to the existing LHN policy on searching of inpatients would be appropriate.
- 286.** The ingestion of the caustic substance caused intense pain and agitation from the burns, in particular to the oesophagus. She has begun to vomit. The cardiac arrest did not occur until the restraint, supporting the view the ingestion did not directly cause the death. Already subject to a number of risk factors such as obesity and agitation, she was held for an excessive period of time, some 23 minutes in the prone restraint position. The way in which the restraint was conducted was fundamentally flawed, breaching numerous essential requirements for the use of prone restraint. Cyanosis became evident consistent with a lack of oxygen (hypoxia). A cardiac arrest followed.

¹²⁹ Adams 28/02/2011 p81

¹³⁰ Vinen 28/02/2011 p81

¹³¹ Adams 28/02/2011 p93, 94

¹³² Vinen 28/02/2011 p87,92

¹³³ B.E .Vol 5 tab 126

287. The ingestion of a caustic substance was undoubtedly a contributing factor and but for the ingestion of the substance the restraint would not have occurred. Nevertheless, the primary cause of death was due to positional asphyxia from the manner in which Mrs Djordjevic was restrained.
288. There is no evidence to conclude Mrs Djordjevic intended to commit suicide by the ingestion of the caustic substance. Why it was consumed is unclear but what is clear is the action was taken at a time she was suffering from an acute relapse of schizophrenia. A symptom of psychosis can be command hallucinations.¹³⁴

A litany of failings

289. The birth of a baby for the Djordjevic family should have been a joyous occasion. It turned to an unimaginable nightmare.
290. As is often the case in disastrous happenings, there is no single causal event but rather a series of errors and systemic failings each compounding on the other. An initial failing in a system should have been detected and corrected at the next level, but it too failed and so on. It is the same in the tragic death of Mrs Djordjevic.
291. Although the primary event that caused her death was the manner of restraint in the mental health seclusion room subsequent to the ingestion of a caustic substance, it would be artificial and wrong to disregard the many events preceding the restraint. There were in fact multiple errors by health professionals and the Hospital each compounding on the next that stretches back to the time Mrs Djordjevic found she was pregnant.
292. Perhaps the most telling indication of the lack of communication between health professionals and failings within the Hospital is despite regular attendances at CMHS, a shared care arrangement with her general practitioner and the Hospital, her attendance at the antenatal unit at least 12 times for a check up¹³⁵ and actually giving birth by caesarean operation, the first time the Hospital was clearly aware of her schizophrenia was at the time of her first period of catatonia on 5 May 2008.
293. The family sought a recommendation be made to the Colleges of General Practitioners, Obstetricians and Gynaecologists they implement education and awareness programs on the importance of psychiatric illnesses in pregnant women including the need for communication of diagnosis and maintenance of treatment. Neither College were parties to the inquest and unable to address the issues, and it is not appropriate that a formal recommendation as sought be made. Nevertheless I consider the lack of communication evident warrants a copy of the findings be forwarded to the Colleges for their information.

¹³⁴ Dr Parmegiani statement vol 2 tab 59a

¹³⁵ Hospital notes p211

294. It is unreasonable to expect perfection in the health system. Mistakes will occur in any organisation and the task is to make changes to minimise a recurrence of those errors. Nevertheless there were a litany of failings by some health professionals and the Hospital itself in the care of Mrs Djordjevic. In summary ---

- . There was a failure by the general practitioner Dr Fernandez to provide an informed handover regarding Mrs Djordjevic's mental health to his colleague Dr Ooi.

- . There was a failure by the general practitioner Dr Ooi who assumed carriage of her neonatal care to properly enquire about her mental condition and medication and notify the Hospital accordingly.

- . There was a failure by CMHS to communicate with the Hospital about her mental illness.

- . There was a failure by CMHS to have a case management system that dealt with her total care and not just the taking of anti psychotic medication.

- . There was a failure by the obstetric registrar Dr Wanat to properly review the nursing and medical history and arrange a mental health review.

- . There was a failure by the obstetric registrar surgeon Dr Woo to properly review the nursing notes and appreciate the significance of the anti-psychotic medication and arrange a mental health review.

- . There was a failure by nursing staff, through a lack of proper education by the Hospital to comply with the medication management policy that allowed her to self medicate an anti-psychotic drug.

- . There was a failure by staff to properly review nursing notes and ensure a mental health review was carried out.

- . There was a failure to have a mental health representative at the Hospital neonatal intake meetings for patients with psycho-social needs and a consequent failing to understand the drug she was taking was not for depression and to respond appropriately.

- . There was a failure by mental health staff to have greater psychiatric medical input into the decision to seclude and restrain.

- . There was a failure to involve psychiatric medical input in the prescription of some medications when in the mental health unit.

- . There was a failure to maintain observation of Mrs Djordjevic immediately after placement in the mental health unit seclusion room.

. There was a failure to comply with the essential precautions required in restraining someone in the prone position that led to positional asphyxia.

295. It is clear the failings were many. Even allowing for the danger of hindsight bias, the failings were alarming and many fundamental. Mrs Djordjevic and her family were entitled to receive better health care. They were let down in the most tragic circumstances.

296. It is hoped the family may receive some degree of comfort from the fact that the Local Health Network has appropriately responded to the death with a series of systems changes to hospital practices aimed at improving patient safety¹³⁶ and from the recommendations arising from the inquest.

297. The Court extends to the family of Mrs Djordjevic its sincere sympathies for their loss.

FINDING

298. Mrs Jasmina Djordjevic died on 14 May 2008 at Wollongong Hospital, New South Wales from hypoxic brain injury as a result of a cardiac arrest due to positional asphyxia from the manner of her restraint following the ingestion of a caustic substance.

RECOMMENDATIONS

To the Minister New South Wales Department of Health

A review is conducted on a statewide basis of the hospital directive "Seclusion Practices in Psychiatric Facilities" with consideration given to whether there should be a direction that continuous observation of a patient occurs once a patient is placed in seclusion.

The Local Health Network consider whether the policy Patient Care Levels for Acute Mental Inpatient Units dated March 2011 should be clarified by a discrete and express statement that continuous observation of a patient occurs when a patient is placed in seclusion.

A review be conducted on a statewide basis of the policy /practices involving the method of restraint throughout all Hospital departments with consideration given to a direction that the prone restraint method be avoided if at all possible and that there be consequent training and retraining of staff.

To the Crown Solicitor's Office

¹³⁶ Letter from LHN to Coroner with annexures as to implementation of recommendations from RCA dated 26 May 2011

The findings as to the manner and potential dangers of the prone method of restraint of patients are forwarded to the Australasian College for Emergency Medicine and Royal Australian and New Zealand College for Psychiatrists for their information and consideration in the event of formulation of policy as to the preferred method of restraint.

The findings (in particular paragraphs 229 to 288 of the reasons) as to the possible dangers of ingestion of toothpaste are forwarded to the Department of Health for their information and consideration.

The findings (in particular paragraphs 30 to 93 and 293 of the reasons) be forwarded to the Royal College of General Practitioners and Royal Australian College of Obstetricians and Gynaecologists for their information and possible consideration in ongoing professional development programs involving communication of a mental health diagnosis to other health professionals and awareness of the significance of mental illness in pregnant women.

Ian Guy

**Deputy State Coroner
Wollongong**

23 June 2011