JURISDICTION	**:**	CORONER'S COURT OF WESTERN AUSTRALIA
ACT	**:**	CORONERS ACT 1996
CORONER	**:**	Philip John Urquhart, Coroner
HEARD	**:**	29 SEPTEMBER 2021
DELIVERED	**:**	6 JANUARY 2022
FILE NO/S	**:**	CORC 594 of 2018
DECEASED	**:**	RYAN, LOUISA BETTY

Catchwords:

Nil

Legislation:

Nil

Counsel Appearing:
Ms R Collins assisted the Coroner
Mr C Mofflin (State Solicitor's Officer) appeared on behalf of the South Metropolitan Health Service

Case(s) referred to in decision(s):

Nil

Coroners Act 1996
(Section 26(1))

RECORD OF INVESTIGATION INTO DEATH

I, Philip John Urquhart, Coroner, having investigated the death of ***Louisa Betty RYAN*** *with an inquest held at Perth Coroners Court, Central Law Courts, Court 85, 501 Hay Street, Perth, on 29 September 2021, find that the identity of the deceased person was* ***Louisa Betty RYAN*** *and that death occurred on 16 May 2018 at Fiona Stanley Hospital, Murdoch, from aspiration pneumonia with respiratory failure complicating medical management of major depression with catatonia in an elderly lady with underlying heart disease in the following circumstances:*

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INTRODUCTION

1 The deceased (Ms Ryan) died on 16 May 2018 from aspiration pneumonia with respiratory failure that was complicated by the medical management of her major depression with catatonia. In addition, Ms Ryan was 89 years old with an underlying heart disease. At the time she was diagnosed with aspirational pneumonia, Ms Ryan was an involuntary patient under the *Mental Health Act 2014* (WA).

2 Accordingly, Ms Ryan was a "*person held in care*" within the meaning of *Coroners Act 1996* (WA) and her death was therefore a "*reportable death*".[1]

3 In such circumstances, a coronial inquest is mandatory as "*it appears that the death was caused, or contributed to, while the deceased was a person held in care*".[2] Where the death is of a person held in care, I am required to comment on the quality of the supervision, treatment and care the person received while in that care.[3]

4 I held an inquest into Ms Ryan's death on 29 September 2021. I heard evidence from Dr Simon Vichi, the consultant psychiatrist at Fremantle Hospital, who treated Ms Ryan as an inpatient.

5 The documentary evidence at the inquest comprised of one volume which was tendered as exhibit 1. Two additional exhibits were tendered during the course of the inquest and they became exhibits 2 and 3.

6 My primary function at the inquest was to investigate the quality of Ms Ryan's treatment and the care that was provided to her during her final admission at Fremantle Hospital, including the circumstances of her death. My investigation

[1] Section 3, *Coroners Act 1996* (WA)
[2] Section 22(1)(c) *Coroners Act 1996* (WA)
[3] Section 25(3) *Coroners Act 1996* (WA)

into how Ms Ryan's death occurred and the cause of her death are fact-finding functions.

MS RYAN

Background [4]

7 Ms Ryan was born at North Fremantle Hospital on 7 July 1928. She had a twin brother and an older brother. Ms Ryan went to Bicton Primary School, before attending Princess May High School in Fremantle. She stayed at school until she was 15 years old.

8 After leaving school, Ms Ryan was employed at the Naval Offices in Fremantle, before she married her husband. Ms Ryan and her husband had two children, a girl and a boy, and she later returned to work at Coles in Fremantle and then part-time at Stammers in East Fremantle. At the time of her death, Ms Ryan and her husband had been married for 67 years.

Ms Ryan's health [5]

9 In her later years, Ms Ryan had a number of comorbidities. These included atrial fibrillation, pulmonary oedema, Type 2 diabetes, Parkinsonism, recurrent urinary tract infections and recurrent falls. She moved into a residential aged care facility in 2016.

10 The most notable health issue Ms Ryan had was a long history of relapsing depression with catatonia. Catatonia is a syndrome characterised by an inability to move normally, despite having no physical abnormality preventing movement. The syndrome occurs in the context of underlying psychiatric disorders, including depression. Oral medication had limited effect in treating

[4] Exhibit 1, Volume 1, Tab 7, Report of First Class Constable Edwards dated 5 August 2018
[5] Exhibit 1, Volume 1, Tab 24, Clinical Incident Investigation Report dated 30 July 2018

this condition for Ms Ryan. However, she had responded positively to electroconvulsive therapy (ECT) in the past, dating back to 1986. This therapy had always been administered to Ms Ryan on an involuntary basis as she was unable to give consent to the treatment and there were significant risks to her health.[6]

11 ECT uses an electrical current to produce a generalised seizure under anaesthesia. It is primarily used to treat severe depression. It can be an effective and rapid treatment for depression in specific circumstances.

12 During an ECT procedure, electrodes are placed on a patient's skull who is given a general anaesthetic and a muscle relaxant. An electrical current is delivered through the electrodes to induce the generalised seizure. Usually, ECT treatments are delivered twice a week, for a total of 9-12 treatments. It can also be used in maintenance therapy. Adverse side effects of ECT include aspiration.

13 On 8 December 2017, Ms Ryan was admitted to hospital for treatment of an episode of catatonic depression. She had presented with cognitive decline, decreased mobility and increased rigidity. These conditions had led to minimal food intake by Ms Ryan for the previous seven days. Over the course of the following five weeks, Ms Ryan received nine ECT treatments. Following the final treatment, a chest x-ray showed signs of aspiration pneumonia for which she was commenced on intravenous antibiotics. Ms Ryan recovered from the aspiration pneumonia and she was able to be discharged back to the residential aged care facility.[7]

[6] Exhibit 1, Volume 1, Tab 28.1, Letter from Dr Briony Hart dated 9 May 2018, p.1; Exhibit 1, Volume 1, Tab 19, Letter from Dr Vichi dated 18 October 2018, p.1
[7] Exhibit 1, Volume 1, Tab 20, Letter from Dr Vichi dated 18 December 2019, pp.1-2

EVENTS LEADING UP TO MS RYAN'S DEATH

14 Although the ECT treatments referred to above were initially successful, in or about early April 2018, Ms Ryan had begun to deteriorate.[8] Prior to that, she had been going out for drives in the car with her family and walking with a frame. By late April 2018, she had deteriorated significantly. There was resistance to eating and drinking and she was "*despondent and withdrawn sitting in a wheelchair gazing blankly into space and not responding*".[9]

15 There were three courses of medical treatment available to Ms Ryan. The first was another course of ECT treatment, the second was the administration of benzodiazepines and the third was palliation.[10]

16 Benzodiazepine treatment was not likely to be successful as it had not worked effectively in the past.[11] In those circumstances, Ms Ryan's community psychiatrist recommended the following:[12]

> In discussing with Anne [Ms Ryan's daughter] today, there has been a rapid deterioration in the lady where longitudinally we know she has a vulnerability for catatonia with ECT being the only treatment modality that has gained any real traction with her symptoms. Even as recently as six weeks ago she seemed to be having some quality of life and be engaged, reactive and integral to family life, however this is no longer the case. While she is frail and 89, I do not feel that we should treat her age, rather her baseline and there has certainly been a significant deterioration from this point. Saying that I think we should be mindful that there is only an ongoing vulnerability to catatonia and we have to approach her care with some sensitivity and caution.
>
> To this end I do not feel there is anything to be gained by pursuing outpatient ECT given the rapidity of her deterioration and while she is eating and drinking, I think we should get on with an inpatient admission. Whilst I would defer to the inpatient psychiatrist, I suspect that oral medication will not be efficacious as this has been the case previously and I would advise getting on with acute ECT as a matter of

[8] Exhibit 1, Volume 1, Tab 28.1, Letter from Dr Briony Hart dated 9 May 2018
[9] Exhibit 1, Volume 1, Tab 28.1, Letter from Dr Briony Hart dated 9 May 2018, p.1
[10] ts 29.9.21 (Dr Vichi), p.26
[11] Exhibit 1, Volume 1, Tab 28.1, Letter from Dr Briony Hart dated 9 May 2018, p.2
[12] Exhibit 1, Volume 1, Tab 28.1, Letter from Dr Briony Hart dated 9 May 2018, p.2

> urgency. Given she had an aspiration pneumonia, there needs to be careful anaesthetic referral and review and consideration of this in the set up for ECT.

17 Dr Simon Vichi was Ms Ryan's inpatient psychiatrist at Fremantle Hospital and he agreed with this recommendation from Dr Hart.

18 Pursuant to section 198 of *Mental Health Act 2014* (WA), Dr Vichi made an application to the Mental Health Tribunal (the Tribunal) that Ms Ryan be made an involuntary patient for ECT treatment. The hearing of the application took place on 15 May 2018. The Tribunal granted the application and ordered that (i) the ECT be performed at Fremantle Hospital, (ii) the maximum number of treatments would be 12, (iii) the ECT was to be performed over eight weeks and (iv) the minimum period between any two treatments was to be 40 hours.[13]

19 Due to her rapid physical decline and the risk of further deterioration, Ms Ryan had been admitted to Fremantle Hospital on 10 May 2018 and had received one treatment of emergency ECT prior to the hearing of the application before the Tribunal. This took place on 11 May 2018, pursuant to section 199 of the M*ental Health Act 2014* (WA).[14]

20 Following this procedure, Ms Ryan recovered well and there appeared to be an improvement in her mental state over the course of the next two days. She was also eating and drinking more.[15] Ms Ryan was scheduled to receive a further emergency treatment of ECT on 14 May 2018, but this did not take place as there were concerns about her increased heart rate. However, after a review, it was determined her heart rate would not be a concern as her pacemaker was working well.[16]

[13] Exhibit 1, Volume 1, Tab 11, Decision of the Mental Health Tribunal
[14] Exhibit 1, Volume 1, Tab 19, Letter from Dr Vichi dated 18 October 2018, p.2
[15] Exhibit 1, Volume 1, Tab 19, Letter from Dr Vichi dated 18 October 2018, p.2
[16] Exhibit 1, Volume 1, Tab 19, Letter from Dr Vichi dated 18 October 2019, p.2

21 Ms Ryan's daughter, who was also her mother's next of kin, was present at the hearing of the Tribunal on 15 May 2018 when the specific risk of aspiration pneumonia was raised. Ms Ryan's daughter was aware of the increased risks of going ahead with ECT, however, she understood that the alternative was likely to be a progressive deterioration in her mother's physical health that would be treated palliatively, before her eventual death. In those circumstances, Ms Ryan's daughter understandably supported the application.[17]

22 On 15 May 2018, Ms Ryan was reviewed by a speech pathologist. The assessment was that she had moderate oropharyngeal dysphagia (difficulty in swallowing), secondary to Parkinsonism and catatonia. The speech pathologist advised to only feed Ms Ryan when she was alert and for her to continue to have thickened fluids and a moist, minced diet.[18]

16 May 2018 [19]

23 At 9.30 am on 16 May 2018, ECT treatment was administered to Ms Ryan at Fremantle Hospital. Observations after the procedure were within normal limits, and it was documented that Ms Ryan was alert. She returned to the ward where observations at 10.25 am were within normal limits, and it was again recorded that Ms Ryan was alert. She was given her regular medications crushed in a small amount of thickened fluids at 11.00 am.

24 Following this, her oxygen levels dropped to a very low level and a medical emergency team (MET) call was initiated. Doctors attending the MET call included the consultant anaesthetist and Dr Vichi. The assessment was that Ms Ryan had aspirated on the thickened fluids she had been given. The doctors were in agreement that she would not benefit from intubation, non-invasive

[17] Exhibit 1, Volume 1, Tab 19, Letter from Dr Vichi dated 18 October 2019, p.2
[18] Fremantle Medical Hospital Medical Records
[19] Fremantle Medical Hospital Medical Records

ventilation or ICU treatments. It was also agreed she should be managed on the medical ward with oxygen, chest physiotherapy and antibiotics. It was also determined that if Ms Ryan recovered, she should not have any further attempts at ECT due to her now high-risk of death during that procedure.

25 As a result, Dr Vichi completed the relevant form revoking the inpatient treatment order made by the Tribunal.[20] The time and date of that form was 12.47 pm, 16 May 2018. Dr Vichi recorded that the reason for the revocation of the inpatient treatment order was that Ms Ryan had been "*made involuntary to receive ECT but now not likely to require ongoing ECT due to adverse effect*".[21]

26 After discussions with Ms Ryan's husband, daughter and son, a Not For Cardiopulmonary Resuscitation form was completed on 16 May 2018 at 1.35 pm.[22]

Transfer to Fiona Stanley Hospital

27 A second MET call was initiated at 3.25 pm on 16 May 2018. Ms Ryan was in severe respiratory distress, with a raised respiratory rate and low oxygen levels despite being given high-flow oxygen. A decision was made that Ms Ryan's ongoing management should be at a tertiary hospital. She was subsequently transferred by ambulance to Fiona Stanley Hospital (FSH). She was admitted to FSH at 5.20 pm on 16 May 2018.[23]

28 At FSH, Ms Ryan's oxygen levels remained vey low. She also had low blood pressure, a raised respiratory rate and heart rate and an electrocardiogram (ECG) indicated possible ischaemic changes. A chest x-ray showed marked

[20] Exhibit 1, Volume 1, Tab 12.2, Form 6A – Inpatient Treatment Order in Authorised Hospital.
[21] Exhibit 1, Volume 1, Tab 12.2, Form 6A – Inpatient Treatment Order in Authorised Hospital, p.1
[22] Exhibit 1, Volume 1, Tab 15.3, Not For Cardiopulmonary Resuscitation form dated 16 May 2018
[23] St John Ambulance Patient Care Record dated 16 May 2018

progression over the previous six hours with a right lower lobe collapse and pulmonary oedema.

29 Ms Ryan's outcome was predicted to be very poor and, after consultation with her family, a decision was made for her to receive palliative care only.

30 Ms Ryan was kept comfortable until she died at 10.30 pm on 16 May 2018.[24]

CAUSE AND MANNER OF MS RYAN'S DEATH

Cause of death [25]

31 Dr Jodi White, a forensic pathologist, conducted an external post mortem examination on Ms Ryan's body on 21 May 2018. Dr White also reviewed Ms Ryan's medical history. Although Dr White requested a toxicological analysis of Ms Ryan's post mortem blood sample, that blood sample was deemed insufficient to undertake a full drug screen.

32 At the conclusion of her examination, and after reviewing Ms Ryan's medical history, Dr White was of the view that the cause of death was aspiration pneumonia with respiratory failure complicating major depression with catatonia and its medical management in an elderly lady with underlying heart disease.

33 I accept and adopt the conclusion expressed by the forensic pathologist as to the cause of Ms Ryan's death.

Manner of death

34 I am satisfied that, following ECT treatment, Ms Ryan was given thickened fluids which, due to her problems with swallowing, subsequently entered her

[24] Exhibit 1, Volume 1, Tab 4, Death in Hospital Form dated 16 May 2018
[25] Exhibit 1, Volume 1, Tab 5.1-5.3, Supplementary Post Mortem Report, External Post Mortem Report, Letter from Dr J White dated 24 May 2018

lungs causing her to develop pneumonia and breathing difficulties. This, against a background of Ms Ryan's other comorbidities, resulted in her death.

35 Accordingly, I find that the death arose by way of accident.

QUALITY OF SUPERVISION, TREATMENT AND CARE OF MS RYAN

36 Based upon all the evidence before me, I am satisfied that the supervision, treatment and care of Ms Ryan was appropriate during the last occasion she was made an involuntary patient for the purpose of receiving ECT treatment.

37 Although such treatment for someone of Ms Ryan's age and multiple comorbidities was high risk, I am satisfied it was an appropriate treatment choice. Ms Ryan was clearly experiencing a major depressive episode which was causing her physical condition to rapidly deteriorate. As she had had a previous poor response to pharmacological interventions, the only other options were a further course of ECT treatments or palliative care. Given Ms Ryan's history of responding well to ECT treatments, it was the only potentially life-saving option to take.

38 Although the ECT treatment preceding this latest therapy had resulted in Ms Ryan acquiring aspiration pneumonia, I am satisfied that all health service providers involved in the decision to commence further ECT treatment deemed it necessary and appropriate. I also find that they acknowledged the risk of possible complications, both during and after the last ECT treatment, and took all possible measures to reduce that risk.

39 I am also satisfied that Ms Ryan's family members were provided with the opportunity to discuss and weigh the risks and benefits of further ECT treatment with those health service providers involved. I note that Ms Ryan's

family have expressed gratitude to Dr Vichi for the care that he had provided to her.[26]

40 Although Dr Vichi acknowledged, with the considerable benefit of hindsight, that a palliative approach to Ms Ryan might have been more appropriate,[27] I can fully understand why he, and Ms Ryan's family, took the course of action that they did.

CONCLUSION

41 All too frequently this court encounters cases in which a person's life is significantly affected by a serious mental health illness. Ms Ryan's case can now be added to that list. She was at the mercy of a recurrent major depressive disorder that also burdened her with catatonia. The only treatment that effectively managed this disorder was ECT. Unfortunately, that treatment option was always going to be very risky for someone of Ms Ryan's age and comorbidities.

42 I extend my condolences to the family of Ms Ryan.

PJ Urquhart
Coroner
6 January 2022

[26] ts 29.9.21 (Dr Vichi), p.25
[27] ts 29.9.21 (Dr Vichi), p.24