IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2020 003618

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

*Section 67 of the **Coroners Act 2008***

Findings of:	Jacqui Hawkins, Deputy State Coroner
Deceased:	Cindy Jane Martin
Date of birth:	14 September 1979
Date of death:	07 July 2020
Cause of death:	1(a) COMPLICATIONS OF WHO CLASS III OBESITY
Place of death:	Broadmeadows Hospital, 35 Johnstone Street, Broadmeadows, Victoria, 3047
Keywords:	MENTAL HEALTH ACT; INPATIENT; ABORIGINAL WOMAN; SCHIZOPHRENIA; WHO CLASS III OBESITY; OBSTRUCTIVE SLEEP APNOEA; CPAP MACHINE

INTRODUCTION

1. Cindy Jane Martin was 40 years old when she passed on 7 July 2020. Ms Martin was of Aboriginal descent.

2. Ms Martin had a history of physical and mental health issues including schizophrenia, obesity, obstructive sleep apnoea, and borderline personality disorder.

3. At the time of her passing, Ms Martin was an inpatient under the *Mental Health Act 2014* (Vic) for treatment of schizophrenia. She was admitted on 30 June 2020 with increasing paranoia, hallucinations, and delusions.

THE CORONIAL INVESTIGATION

4. Ms Martin's passing was reported to the Coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (the Act). Reportable deaths include deaths that are unexpected, unnatural or violent or result from accident or injury.

5. Ms Martin was *"a person who immediately before death"* was in care.[1] Section 52 of the *Coroners Act 2008* recognises the vulnerability of people who are in the care of the State by requiring that their deaths are reported to the coroner irrespective of the cause of death. A further safeguard is the mandatory requirement for an inquest as part of the coronial investigation. However, if the investigating coroner is satisfied that the death is due to natural causes, they may choose to finalise the investigation without an inquest.[2] In such a case, the coroner must publish their finding.

6. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

7. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of

[1] Under section 3(1) of the *Coroners Act 2008*, a person placed in care includes a patient detained in a designated mental health service within the meaning of the *Mental Health Act 2014* (Vic). Pursuant to section 4(2)(c) of the Act, the death of such a person is reportable irrespective of the cause of death.

[2] Section 52 (3A) *Coroner Act 2008.*

comments or recommendations in appropriate cases about any matter connected to the death under investigation.

8. Victoria Police assigned First Constable Bridget Bohlmann to be the Coroner's Investigator for the investigation of Ms Martin's death. The Coroner's Investigator conducted inquiries on my behalf, including taking statements from witnesses – such as family, the forensic pathologist, treating clinicians and investigating officers – and submitted a coronial brief of evidence.

9. Upon receipt of the brief, I requested the Coroner's Prevention Unit (**CPU**)[3] to conduct a review into the care provided to Ms Martin whilst she was admitted to Broadmeadows Inpatient Unit. I have considered their findings below.

10. This finding draws on the totality of the coronial investigation into the passing of Ms Martin including evidence contained in the coronial brief. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.[4]

IDENTITY OF THE DECEASED

11. On 15 July 2020, Cindy Jane Martin, born 14 September 1979, was visually identified by her brother, Daniel Martin, who signed a formal statement of identification to this effect.

12. Identity is not in dispute and requires no further investigation.

MEDICAL CAUSE OF DEATH

13. On 13 July 2020, Dr Paul Bedford, Forensic Pathologist from the Victorian Institute of Forensic Medicine (**VIFM**), conducted an autopsy any provided a written report of his findings. Dr Bedford also considered the post-mortem computed tomography (**CT**) scan, Victoria Police Report of Death Form 83, and the medical deposition.

14. Dr Bedford noted that Ms Martin had been admitted to a psychiatric unit. Seven days after her admission she suffered a sudden unexpected cardiac arrest which she did not survive. The post-

[3] The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the Coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations. The CPU also reviews medical care and treatment in cases referred by the coroner. The CPU is comprised of health professionals with training in a range of areas including medicine, nursing, public health and mental health.

[4] Subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

mortem examination showed evidence of an enlarged heart with minimal coronary artery atheromatous disease. No pulmonary embolus was found. Ms Martin's weight was 143kg with a markedly elevated BMI of 55.2kg/m2.

15. Routine toxicological analysis identified the presence of a number of drugs including valproic acid, chlorpromazine, diazepam, zuclopenthixol, aripiprazole and olanzapine. None were identified at toxic levels.

16. Dr Bedford found that Ms Martin had a sudden cardiac event which is predisposed to by obesity and by having an enlarged heart. No other internal pathology or injury likely to lead to death was identified. Toxicology studies do not suggest death was caused by drug toxicity.

17. Dr Bedford was of the view Ms Martin passed due to natural causes. Dr Bedford provided an opinion that the medical cause of death was 1 (a) complications of WHO Class III Obesity.

18. I accept Dr Bedford's opinion.

CIRCUMSTANCES IN WHICH THE DEATH OCCURRED

19. On 30 June 2020, Ms Martin was admitted to Broadmeadows Inpatient Unit (**BIPU**) on an assessment order by Dr Anandaram Jothibabu. Dr Jothibabu assessed Ms Martin to be agitated with limited rapport. She was preoccupied with psychotic symptoms including delusional beliefs and hallucinations. She was considered to be at risk of deteriorating if left untreated. Ms Martin was oriented but had limited insight about her condition.

20. After her admission, Ms Martin remained psychotic and aggressive. Ms Martin required regular nursing and medication to settle

21. Ms Martin required a Continuous Positive Airway Pressure (**CPAP**) machine due to her obstructive sleep apnoea. However, her mental health condition affected her ability to tolerate the machine while sleeping and she refused to wear it.

22. During periodic ward checks on 7 July 2020, Ms Martin was found unresponsive in her room. A code blue was called and medical officers performed CPR, however Ms Martin could not be revived. She was confirmed deceased at approximately 2:00am.

FAMILY CONCERNS

23. Ms Martin's son, Jesse Parfett-Martin, contacted the Court through his legal representatives and raised concerns with the toxicology levels in Ms Mortem's post-mortem examination. They questioned whether these were appropriate levels and appropriate medications for her condition, as well as whether the side-effects of the medication may have contributed to her passing.

24. In light of these concerns, I requested Dr Angela Sungaila, Toxicologist and Forensic Physician at the VIFM to provide a supplementary report. I have also considered the details of the In-Depth Case Review (**IDCR**) conducted by Northwest Area Mental Health Service following Ms Martin's passing.

Consideration of family concerns regarding the toxicology report

25. I note that Dr Bedford stated in his written report following the autopsy that none of the drugs in Ms Martin's system were at toxic levels.

26. Dr Sungaila advised that following Ms Martin's admission on 30 June 2020, her behaviour was difficult, aggressive, and uncooperative. The records indicate she was extremely unwell. She frequently refused vital sign checks. Sedation and antipsychotic medication were necessary to control Ms Martin's psychotic symptoms and moderate her aggression so that she was not a risk to herself or others.

27. Ms Martin was assessed on 1 July 2020 and a treatment plan was implemented. She was started on antipsychotic medication Paliperidone at 3mg, continuation of mood stabiliser Sodium Valproate 500mg twice daily, long-acting antipsychotic medication Aripiprazole 400mg (which was next due on 17 July 2020), use of antipsychotic medication Chlorpromazine 100mg three times a day and Diazepam 10mg three times a day.

28. The depot Aripiprazole injection was last given to Ms Martin on 19 June 2020. Dr Sungaila stated that this would have remained at an effective blood level throughout her admission, however was clearly insufficient to control Ms Martin's behaviour and symptoms. Further sedation was added and there was likely to have been an additive effect.

29. Acting Director of Clinical Services at NorthWest Area Mental Health Service, Dr Devapriya Rudolph advised that Ms Martin appeared drowsy during medical reviews from 4 to 6 July

2020. As a result, the sedative oral antipsychotic medications Chlorpromazine (anti-psychotic) and Diazepam (anxiolytic) were discontinued. The IDCR concluded this care was appropriate.

30. Dr Rudolph stated due to the severity of highly distressing psychotic symptoms for some patients with schizophrenia, many require multiple medications. Dr Rudolph advised it is common practice to combine medications to try and achieve symptomatic control and alleviate a patient's distress.

31. Ms Martin's psychotic symptoms were extremely debilitating and distressing to her. She did not respond to conventional treatment. Dr Rudolph further advised that NorthWest Area Mental Health Service was mindful of the side effects of the medications prescribed and were making considered decisions to strike a balance between alleviating highly distressing symptoms for Ms Martin, versus the risk of causing undesirable side effects.

32. Dr Sungaila stated that Ms Martin's sleep apnoea was noted as a risk throughout her admission. Previous medical records indicate Ms Martin had been advised to use a CPAP machine but did not.

33. The sedation caused by the drugs prescribed to Ms Matin during her admission was reported in the medical records. She was observed at times to fall asleep at the table, was incoherent and had slurred speech. Ms Martin at one point herself stated she felt she was over-sedated.

34. Vital sign examinations were carried out on Ms Martin unless she refused. Visual observations occurred over night and her oxygen levels were attended to during the day. The medical record notes that recommendations were made to monitor sedation, and as a result of evidence of oversedation some medications were withheld. Dr Sungaila noted that given the long action of all of the drugs, the withholding of a few doses may not have had a major effect.

35. Dr Sungaila also noted that none of the drugs identified at post-mortem were at a high or concerning level and none were in the toxic range. However, all of the drugs prescribed had a sedating effect.

36. Sedation in the presence of sleep apnoea would have diminished a waking signal in the presence of hypoxia. Atypical antipsychotic (**AA**) drugs[5] *may* have decreased reflexes in the upper

[5] AA drugs were developed with fewer side effects with the aim of better compliance. AA drugs are less likely to cause extrapyramidal side effects. These adverse effects cause symptoms similar to Parkinson's disease and may be irreversible.

airway such as to reduce its tone and cause obstruction. In the presence of Ms Martin's obstructive sleep apnoea, this had the potential to cause a marked worsening of the condition.

37. Dr Sungaila opined that in general, scant attention was paid to the significance of Ms Martin's obstructive sleep apnoea. Given her diagnosis came a few years before her passing, the consequences of her severe mental illness allowed her serious physical illness to go untreated. Dr Sungaila was unable to identify any opportunities for prevention.

38. The medication prescribed to Ms Martin during her admission has been further considered by the CPU below.

CPU REVIEW

Ms Martin's history

39. Ms Martin had a lifelong and complex psychiatric and social history with repeated and intergenerational trauma. She was diagnosed with treatment resistant schizophrenia and had several admissions to public mental health units in Victoria. These included voluntary and involuntary admissions when she was subject to the *Mental Health Act 2014* (Vic).

40. Ms Martin had been engaged with community treatment since 2011. She had been admitted to acute units at BIPU, St Vincent's Inpatient Psychiatric Unit, and recovery and rehabilitation units NorthWest Prevention and Recovery Care (**PARC**) and NorthWest Continuing Care Unit (**CCU**).

41. The NorthWest Area Mental Health Service Community Team (**NWAMHS**) commenced case management following a referral from PARC on 12 July 2019. The CPU were of the view that the case management provided appears appropriate and proactive and included a shared focus on Ms Martin's mental and physical health with the Victorian Aboriginal Health Service (**VAHS**) General Practitioner (**GP**) Dr Sarah Cush. Ms Martin engaged with these services voluntarily.

42. In 2015 Ms Martin was treated with the oral antipsychotic clozapine which was not successful. It appears she was then treated with depot antipsychotic injections, though Ms Martin would often refuse these and become unwell and require admission. When unwell, Ms Martin presented as aggressive with homicidal thinking and behaviours which required episodes of mechanical restraint and resulted in incarceration for assaults. She had distressing levels of paranoia towards her family and experienced insomnia.

43. Ms Martin was frequently verbally abusive and threatening. She often refused to engage in recommended treatment including physical healthcare and the use of medications to treat her acute behavioural disturbances. These behaviours did reduce once the therapeutic effects of the medication were reached.

44. Dr Cush and VAHS supported Ms Martin in the community from 2017. The VAHS records indicate a proactive approach was taken to Ms Martin's physical and mental health. This included comprehensive care plans and treatment arrangements and long-acting injections. Ms Martin received referrals and treatment at health services for her conditions.

45. The Women's Integrated Team Care Program for Aboriginal and Torres Strait Islander People at the Royal Melbourne Hospital sourced a CPAP machine for Ms Martin in 2017 following a diagnosis of obstructive sleep apnoea. Ms Martin also received NDIS support and a disability support pension.

46. Ms Martin had a BMI of 55.2 at the time of her death. Dr Cush and VAHS supported her to lose weight in 2017 and 2018, however further funding was unable to be obtained to continue this support. The focus on improving her weight was to enable her to have bariatric surgery. When Ms Martin was unwell, she would miss appointments and not agree to investigations or treatment and was unable to sustain improvements of her physical health.

47. A review of the files of NWMH and VAHS indicate the assessment and care provided to Ms Martin at this time was proactive and involved ongoing monitoring and a focus on engaging Ms Martin in the decision-making. The records indicate the *Mental Health Act 2014* (Vic) was used appropriately and there was a reasonable level of communication between all service providers.

Broadmeadows Inpatient Unit Admission 30 June – 7 July 2020

48. Ms Martin was admitted to BIPU with a deteriorating mental state and associated lack of self-care. She was subject to the *Mental Health Act 2014* (Vic) after a thorough assessment of less restrictive means available. The NWAMHS Community Team had considered a changeover of medications to the antipsychotic paliperidone because of Ms Martin's poor response to the antipsychotic aripiprazole and poor compliance with the antipsychotic amisulpiride.

49. The BIPU admission appears to have followed the usual trajectory of her illness, including being transferred to the Intensive Care Area and recovery up until her passing on 7 July 2020.

50. It was considered that her mental state affected her ability to be safely managed in the low dependency setting. Ms Martin remained aggressive in the intensive care area and refused treatment. Her refusal of oral medications further worsened her mental state.

51. The medical records detailed Ms Martin's repeated and distressing experience of feeling unsafe in her home. Her delusions often incorporated her family, staff, and carers.

52. The CPU were of the view that the mental health care provided at BIPU was appropriate. The CPU also considered the information provided by Dr Rudolph as to the prescribing of multiple antipsychotics during the admission, as this can increase the risk of adverse effects.

53. The medical records indicate Ms Martin did not require further PRN chlorpromazine on 4 July 2020, and that routine prescribing had been mostly withheld from 4 July 2020 because of sedation. After a single dose on the morning of 6 July 2020 it was ceased. The medications reported in the toxicology report are consistent with what was prescribed and administered.

54. The CPU concluded that Dr Rudolph's clinical explanation for the use of multiple antipsychotics was reasonable. Dr Rudolph noted that clinical staff are attuned to the likelihood of adverse effects with polypharmacy. There are physical health risks associated with all antipsychotics, including sudden death, cardiac effects, QT interval lengthening[6] and sedation.

Physical health care

55. Dr Rudolph noted Ms Martin's co-morbidities and opined that there is a limit as to how these conditions can be modified or reversed in the short term in an acute inpatient setting. Ms Martin's conditions were managed through incremental change to risk factors contributing to the illnesses; however these require active patient engagement and participation.

56. The CPU found that this care was reasonable. Ms Martin had a physical examination on 6 July 2020 and a pathology screening on 2 July 2020 which identified low vitamin D levels and dyslipidaemia. Vital observations, including blood sugar levels, were consistently completed and did not suggest any imminent physical risks.

57. Dr Rudolph explained the delay between Ms Martin's admission and the physical examination was due to her agitated state. It is not acceptable to force someone to engage in a physical examination. The electrocardiogram (**ECG**) which can identify cardiac indicators such as QT

[6] The QT interval is measured on an electrocardiogram and is the time from the beginning of the QRS complex, representing ventricular depolarisation, to the end of the T wave, resulting in ventricular repolarisation.

interval changes, was delayed and not completed, however it cannot be assumed the ECG would have identified any issues if it had been completed prior to Ms Martin's death.

Choice of antipsychotics

58. Dr Rudolph detailed that some antipsychotic medications may cause weight gain. The medical records indicate services had the best practice approach of balancing the risks and benefits in prescribing psychoactive medicine. However, when unwell the symptoms alone contributed to Ms Martin's inability to make good choices about her health and to engage in treatment. The prescribing patterns support attempts to maintain Ms Martin's mental health and to reduce the adverse effects, especially weight gain and its associated risks by focusing on weight neutral antipsychotics.

Northwest Mental Health Service In-Depth Case Review

59. The IDCR found the care provided to Ms Martin was appropriate in the circumstances. It did note the delay in the completion of an ECG and that Ms Martin's family and GP had not been contacted to advise of her admission, despite plans to do so. Early family and primary care involvement for a patient in an acute psychiatric unit is best practice and was expected by NWMH. Contact may have increased the likelihood of Ms Martin's CPAP machine being discussed and it being provided to BIPU. However, it cannot be assumed that Ms Martin would have consented to using it.

60. BIPU were aware of Ms Martin's diagnosis of severe obstructive sleep apnoea. The medical records indicate that Ms Martin initially felt better using the CPAP machine and her sleep improved, however she found it annoying and reported she didn't routinely use it.

61. The IDCR noted Ms Martin's BMI and WHO Class III obesity, that she was a heavy smoker, had a diagnosis of schizophrenia and had risk factors for sudden and premature death.

62. Dr Rudolph stated that patients are generally supported to use a CPAP machine if available. However, for patients with a severe mental illness this is not always possible. Ms Martin had previously expressed a reluctance to using a CPAP. Adherence to using a CPAP machine can be a significant issue for patients like Ms Martin with a severe and enduring mental illness.

63. Despite this, the CPU noted that it cannot be assumed that because Ms Martin had refused to have a CPAP machine in the past that she would always refuse its use.

64. The NWMH review focused on Ms Martin's obstructive sleep apnoea and the use of the CPAP machine. A number of recommendations were made which have since been completed. These include ensuring a patient with sleep apnoea is asked whether they use a CPAP machine and adding a prompt to the initial admission checklist regarding sleep apnoea. Further the recommendations ensure that existing guidelines regarding contacting family and GPs are adhered to.

Mental and physical health in the Aboriginal population

65. The National Equally Well organisation specific to the physical health of people with a mental illness was established with the support of the National Mental Health Commission in 2017 and has also become a priority action of the Fifth National Mental Health and Suicide Prevention Plan. According to the 2019 Equally Well publication, two-thirds of people with a severe mental illness are overweight, including half of males and two-thirds of females.

66. In addition, mental illness and cardiovascular disease are the two leading drivers of the burden of disease for Aboriginal and Torres Strait Islander people, which is 2.5 times higher than the greater general community.

67. The National Mental Health Commission provided:[7]

> *Aboriginal and Torres Strait Islander people are estimated to have ten years lower life expectancy than other Australians, with an even greater gap for those with mental illness. Exposure to chronic stress throughout life may contribute to a number of metabolic, cardiovascular and mental disorders that shorten life expectancy in Aboriginal and Torres Strait Islander people.*

CPU conclusions

68. The CPU considered the care provided by the NWAMHS and VHAS was appropriate. The care provided at BIPU was also appropriate and reasonable when considered in the context of Ms Martin's level of distress, aggression, and threats which provided additional barriers to providing care.

69. The outcome of the NWMH IDCR also appears reasonable. However, while acknowledging a patient who is distressed and paranoid is unlikely to want to wear the CPAP face mask, the recommendations do not address what can be done when this occurs.

[7] National Mental Health Commission, 2016. *Equally Well Consensus Statement: Improving the physical health and wellbeing of people living with mental illness in Australia*, Sydney www.equallywell.org.au/wp-content/uploads/2018/12/Equally-Well-National-Consensus-Booklet-47537.pdf

70. While endorsing the recommendations and recognising they should increase the identification of patients who require a CPAP machine, the actions undertaken by NWMH do not address what is to be done in the circumstances where a patient has obstructive sleep apnoea but has refused to use a CPAP machine. The CPU noted that it is unclear if it is reasonable to expect nursing staff conducting checks on a patient to take the required steps to reduce these risks.

FINDINGS

71. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:

    a) the identity of the deceased was Cindy Jane Martin, born 14 September 1979;

    b) the death occurred on 07 July 2020 at Northern Health, Broadmeadows Hospital, 35 Johnstone Street, Broadmeadows, Victoria, 3047, from complications of WHO class III obesity; and

    c) the death occurred in the circumstances described above.

72. Having considered all of the circumstances, I am satisfied that the care provided to Ms Martin was reasonable and appropriate in the circumstances. The evidence indicates Ms Martin passed due to natural causes.

73. I convey my sincere condolences to Ms Martin's family for their loss.

RECOMMENDATION

74. Pursuant to section 72(2) of the Act, I make the following recommendations to Dr Rudolph, Acting Director of Clinical Services at Northwest Area Mental Health Service:

    To improve the safety of patients who have obstructive sleep apnoea and who for reasons of distress, or lack of consent or willingness, will not use their own or a provided CPAP machine, NWMH build on its work with the Royal Melbourne Hospital Department of Respiratory Medicine to:

    a. Explore the options for improving the safety of patients in such circumstances; and

    b. Develop a guideline/advice for the monitoring of patients including any identified indicators of concern.

75. I direct that a copy of this finding be provided to the following:

Jesse Parfett-Martin, Senior Next of Kin

Dr Rudolph, Acting Director of Clinical Services at NorthWest Area Mental Health Service

Peter Kelly, NorthWest Mental Health

Jan Moffatt, DTCH Lawyers (Legal Representatives of NorthWest Mental Health)

Penelope Ralston, Royal Women's Hospital

First Constable Bridget Bohlmann, Coroner's Investigator

Signature:

Jacqui Hawkins, Deputy State Coroner

Date : 31 August 2022