IN THE CORONERS COURT

OF VICTORIA

AT MELBOURNE

Court Reference: COR 2016 2881

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

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

Findings of:	Paresa Antoniadis Spanos, Coroner
Deceased:	DH
Date of birth:	13 February 1976
Date of death:	Between 24 and 25 June 2016
Cause of death:	Clozapine toxicity in a woman with cardiomegaly
Place of death:	Brunswick

I, PARESA ANTONIADIS SPANOS, Coroner,

having investigated the death of DH without holding an inquest:

find that the identity of the deceased was DH born on 13 February 1976

and that the death occurred between 24 and 25 June 2016

at 253 Victoria Street, Brunswick, Victoria 3056

from:

1 (a) CLOZAPINE TOXICITY IN A WOMAN WITH CARDIOMEGALY

BACKGROUND AND PERSONAL CIRCUMSTANCES

1. Ms DH was a 40-year-old mother of two.
2. According to her treating general practitioner, Dr Fiona Cochrane, Ms DH suffered from anxiety and was extremely depressed over many years. She also struggled with alcoholism. Ms DH received treatment from a psychiatrist from 2002 until the psychiatrist's retirement in 2009. From 2009, she received additional treatment from Dr Cochrane in relation to her mental health. Dr Cochrane also referred Ms DH to psychiatrists and psychologists at the St Vincent's Hospital for additional mental health treatment.
3. In a statement to police, Dr Cochrane explained that Ms DH required frequent consultations as well as medication, as many of the antidepressant medications trialled by Ms DH had adverse side effects. In the year preceding her death, Ms DH was also prescribed anxiolytics. At the time of her death, she was being prescribed alprazolam,[1] Imigran,[2] Olmesartan,[3] OsteVit-D,[4] Stildem,[5] and Tazac.[6]
4. Ms DH did not have a history of schizophrenia and was not prescribed clozapine, a highly regulated drug for the treatment of schizophrenia which is considered refractory to other treatments.

[1] 0.5mg tablet, three daily.
[2] 50 mg tablet, one as directed.
[3] 20 mg tablet, one daily.
[4] 1000IU tablet, three daily.
[5] 10mg tablet, one in evening.
[6] 300mg capsule, one in evening.

BRUNSWICK PEER RECOVERY COMMUNITY

5. On 11 April 2016, Ms DH moved into the Brunswick Peer Recovery Community (**PRC**). She had been assisted in the application process by Ms SA, her Partners in Recovery[7] (**PIR**) case worker.

6. PRC facilities are operated by Mind Australia (**'Mind'**), a not-for-profit organisation that works with people aged 16 years and over, whose ability to manage their daily activities and to live in the community is impacted by mental health issues. Mind is not a clinical mental health service. According to Mind's website, PRCs provide individualised, recovery-oriented services in a residential setting. The use of alcohol or illegal drugs is forbidden within PRCs. Mind is funded by the Department of Health and Human Services (**DHHS**), which maintains a monitoring and review role.

7. According to Ms Miranda Baldwin, Team Leader at PRC Brunswick, PRCs are places where people with ill health can learn new skills, be socially included, and learn to manage their mental and physical health in a safe and supportive environment. Residents have complete freedom of movement and are free to come and go as they please. While residents are provided with dinner each night they otherwise look after their own meals and medications. If a resident is ill or requires medical attention, this is arranged by PRC staff, but generally independence is promoted and encouraged.

DECISION NOT TO ALLOW VISITS FROM MS DH'S CHILDREN

8. Shortly after moving to Brunswick PRC, Ms DH told Ms SA that she was very happy there. She reported that her depression, anxiety and suicidality had stabilised, she was eating and sleeping, and had established a routine.

9. On 4 May 2016, a PRC staff member saw that Ms DH's daughter, Violet, was visiting Ms DH in her room. The following day, Ms DH told Ms SA that she had been informed by PRC staff that her children were not allowed to visit her on the PRC Brunswick site. According to Ms DH's friends, Canice Brown and Emma Bowes, Ms DH was told that this was because there was a registered sex offender living at the PRC premises.

[7] PIR is a Department of Health initiative that aims to better support people with severe and persistent mental illness with complex needs, as well as their carers and families, by assisting the multiple sectors and support services they may come into contact with to work in a more collaborative, coordinated, and integrated way.

10. Ms DH told Ms SA that she was confused and felt that she was receiving conflicting messages from staff, as she had been told during the PRC assessment process that her children would be allowed to visit her during the day. A meeting was held that day with Ms DH, Ms SA, PRC Area Manager Andrea Leach, and PRC Team Leader Miranda Baldwin. During the meeting, Ms DH and Ms SA were told that no children under the age of 18 were allowed onto the site. According to Ms SA, this decision greatly distressed Ms DH, who felt that the decision was unfair, and conflicted with Mind's 'family inclusion' policies and brochures.

11. On 9 May 2016, Ms SA attempted to contact both, Ms Leach, and the regional manager of Mind, Di Nelly, leaving a message for them to return her call. On 10 May 2016, Ms DH and Ms SA met with Ms DH's key worker at PRC, to explain that Ms DH wanted to challenge the decision to disallow visits from her children. According to Ms SA, while Ms DH accepted that her children may not be permitted to stay overnight, she thought it incredibly unfair that they would not be allowed to visit during the day.

12. On 24 May 2016, Ms SA received an email from Ms Leach confirming that the decision not to allow Ms DH's children to visit her at the PRC site would stand.

13. On 2 June 2016, Ms SA met with Ms DH's key worker at PRC, and the two discussed Ms DH's safety and contact plans, triggers, strategies, swimming passes and family carer services. Ms SA also raised the impact of the PRC decision not to allow visits from Ms DH's children. A further meeting was scheduled for 27 June 2016 and was also intended to include Ms DH's daughter, Violet, however, Ms DH passed away before this meeting could take place.

CIRCUMSTANCES SURROUNDING ALCOHOL USE

14. In her statement to police, Ms DH's close friend, Candice Brown, reported that one day in May 2016 she was visiting Ms DH at Brunswick PRC and saw some beers in her fridge. When Ms Brown told Ms DH that she wasn't supposed to have alcohol at the PRC, Ms DH responded by saying that everyone at the PRC broke the rules.

15. In her statement to police, Ms DH's friend and PRC co-resident, Ms Bowes, stated that Ms DH's behaviour changed once she was told that her children were not allowed

to visit her at the residence, and she became increasingly depressed.[8] Ms Bowes stated that Ms DH's started to consume alcohol daily and developed a routine of buying alcohol from a bottle shop in the early evening and brining it back to her room to drink. According to Ms Bowes, at times, Ms DH took prescription medications when she drank alcohol. Ms Bowes disclosed that she had provided Ms DH with oxazepam[9] and sleeping tablets, and she was also aware that another co-resident, Michael Kidd[10], had given Ms DH some clozapine.

CIRCUMSTANCES SURROUNDING CLOZAPINE USE

16. Clozapine is a second-generation antipsychotic medication used in the treatment of treatment-resistant schizophrenia. Patients who are prescribed clozapine require careful physical monitoring, as the drug is associated with serious adverse effects, including blood disorders and heart abnormalities such as myocarditis[11] and cardiomyopathy[12]. Due to these risks, clozapine can only be prescribed to patients who have been registered with a clozapine patient monitoring service and given a clozapine patient number. There is a serious risk of harm from over sedation when this drug is used without prescription and without medical supervision.

17. According to his statement to police, in about mid-May 2016, Mr Kidd allowed Ms DH to take *one of his clozapine tablets*, after she told him that she was having trouble sleeping. Mr Kidd added that he gave Ms DH some more clozapine on a further four occasions throughout May and June 2016.

CIRCUMSTANCES PROXIMATE TO DEATH

18. On 23 June 2016, Mr Kidd had a prescription for clozapine dispensed. Of the gull packet of 84 clozapine tablets, he gave Ms DH a full strip of ten 100mg tablets. In his police statement, Mr Kidd stated that he gave her the tablets thinking that she would use them over a long period of time, and not take them all at once.

19. According to her police statement, at about 2.30pm on 24 June 2016, Ms Bowes took Ms DH to the pharmacy to have a prescription for alprazolam dispensed. Afterwards,

[8] This was also echoed by Ms DH's co-resident, Michael Kidd, in his statement to police.
[9] Oxazepam is a benzodiazepine. Oxazepam has the potential for misuse, defined as taking the drug to achieve a high, or continuing t take the drug in the long term against medical advice.
[10] Michael Kidd died on 11 December 2016. His death is the subject of a coronial investigation that is currently ongoing (COR 2016 005874).
[11] Inflammation of the heart muscle.
[12] Disease of the heart muscle.

they both bought some alcohol, and returned to Ms DH's room. While there, Ms Bowes witnessed Ms DH take a full strip of alprazolam tablets, while drinking beer and did not inform any PRC staff members about this.

20. According to one PRC staff member, Tamara Broughton, Ms DH helped Ms Broughton clean up that night after dinner. In her police statement, Ms Broughton stated that Ms DH seemed happy and positive and Ms Broughton did not smell any alcohol on Ms DH's breath.

21. On 25 June 2016, Ms Broughton started work at 6.30pm. During the handover of shift to Ms Broughton, another PRC staff member told her that Ms DH had not been seen all day, despite her engagement plan requiring staff to make contact with her at 2.00pm, 4.00pm and at about 6.00pm. Ms Broughton made a note to follow this up and to try and make contact with Ms DH.

22. At about 7.00pm, Ms Broughton knocked on the door to Ms DH's room, but there was no answer. Ms Broughton then had a conversation with Mr Kidd, during which he asked Ms Broughton whether she had seen Ms DH and told her that he had tried to contact Ms DH by calling and texting and knocking on her door. In her statement to police, Ms Broughton stated that she was not overly concerned at this point.

23. At about 8.30pm, Mr Kidd approached Ms Broughton and told her that he was worried, as he had been unable to contact Ms DH throughout the day and had heard Ms DH's phone ringing out in her room. He eventually disclosed to Ms Broughton that he had given Ms DH some of his clozapine. At this point, Ms Broughton decided to check on Ms DH's welfare, and used a master key to gained access to Ms DH's bedroom. When she entered, she found Ms DH lying on her bed, deceased.

MEDICAL CAUSE OF DEATH

24. On 30 June 2016, forensic pathologist Dr Gregory Young of the Victorian Institute of Forensic Medicine (**VIFM**) reviewed the police report of death to the coroner, medical notes from Carlton Medial Centre, post-mortem computer assisted tomography (**PMCT**) scans of the whole body and performed an autopsy.

25. Dr Young's anatomical findings included cardiomegaly,[13] patchy foci myocarditis in the heart, pulmonary oedema, and hepatic cirrhosis and steatosis[14].

26. Dr Young explained that cardiomegaly is enlargement of the heart that is not in keeping with normal physiological change in an individual, and that increased heart mass is correlated with increased cardiac mortality and morbidity and is an independent risk factor for sudden death due to a fatal cardiac arrhythmia ('heart attack').

27. Routine toxicological analysis of post mortem blood samples detected clozapine[15], zolpidem[16], zopiclone[17] and alprazolam[18] but no alcohol. Toxicological analysis of stomach contents detected 11mg of clozapine. Dr Young advised that clozapine is associated with an increased risk of cardiac arrhythmia due to prolongation of the QT interval in the heart.

28. Dr Young commented that very patchy foci myocarditis was seen in the heart, but that the significance of this was unclear. Myocarditis is where there is inflammation in the muscle of the heart. Dr Young advised that, while there are many different causes, clozapine is known to be associated with an increased risk of myocarditis.

29. Dr Young concluded that the cause of death was *clozapine toxicity in a woman with cardiomegaly*, with the combined effects of clozapine toxicity and cardiomegaly resulting in an increased risk of cardiac arrhythmia leading to death.

STANDARD OF PROOF FOR CORONIAL FINDINGS

30. The standard of proof for coronial findings of fact is the civil standard of proof on the balance of probabilities, with the *Briginshaw* gloss or explication.[19]

31. Adverse findings or comments against individuals in their professional capacity, or against institutions, are not to be made with the benefit of hindsight but only on the basis of what was known or should reasonably have been known or done at the time, and only where the evidence supports a finding that the individual or institution

[13] Heart weight of 494 grams.
[14] A fatty liver.
[15] At 2.1 mg/L.
[16] 0.2 mg/L.
[17] 0.04 mg/L.
[18] 0.02 mg/L.
[19] *Briginshaw v Briginshaw* (1938) 60 C.L.R. 336.

involved departed materially from the standards of their profession, and in so doing, caused or contributed to the death under investigation.

MENTAL HEALTH INVESTIGATION TEAM ADVICE

32. In the course of this investigation, I asked the Mental Health Investigation Team[20] (**MHIT**), part of the Coroners Prevention Unit, to review the overall management of Ms DH by the Brunswick PRC and to provide advice as to specific further investigations to be undertaken in relation to management and supervision at the PRC.

33. The MHIT provided an initial report dated 20 December 2016 ('the first MHIT report') in which it made the following observations.

34. Firstly, the MHIT commented that the decision by the PRC to disallow visits by Ms DH's children appears to have been a major stressor for Ms DH and precipitated her increased misuse of prescription medications and alcohol. The MHIT advised that the importance of family inclusion for people experiencing or recovering from mental illness is well recognised, yet in Ms DH's case, there is no evidence that any short-term strategy was put in place to support her to maintain contact with her children.

35. Secondly, although alcohol was meant to be forbidden at PRC Brunswick, there were few controls to detect and manage the use of alcohol on the premises, and Ms DH's regular alcohol consumption was allowed to continue. In her statement to police, Ms Broughton stated that PRC residents who continue to use alcohol in contravention of PRC rules will eventually be breached, and that a resident who incurs three breaches will be asked to leave. However, in Ms DH's case, the evidence suggests a degree of acceptance of this behaviour. Further, although PRC staff were aware that Ms DH had a history of alcoholism for which she was not then receiving treatment, there is no evidence that this was being proactively managed by staff.

36. Thirdly, while residents at PRC are responsible for managing their own prescriptions and medications, staff were aware that Mr Kidd had shared his clozapine with Ms DH on at least one occasion, and had counselled both Mr Kidd and Ms DH against this practice. Given the potential for serious harm from misusing clozapine, the MHIT advised that a more proactive approach by staff was warranted, to protect the wellbeing of both Ms DH and Mr Kidd.

[20] The MHIT forms part of the Coroner's Prevention Unit (CPU) and provides advice to Coroners and assists them the fulfil their prevention role and contribute to a reduction in preventable deaths.

37. After receiving this report, I sought and obtained further material and information from Mind. An assessment of this material formed the basis of a second MHIT report dated 1 June 2017 ('the second MHIT report'). The second MHIT report considered the findings of an internal review by Mind into the circumstances surrounding Ms DH's death ('the Mind Review'). The Mind Review concluded that there were aspects of Ms DH's care that could have ben managed more formally and consistently with Mind's PRC policies and procedures. Specifically, the Mind Review found that Mind staff could have:

    a) More fully implemented standard procedures once medication sharing was identified, including contacting Ms DH's GP and holding a care team meeting.

    b) More adequately addressed Ms DH's apparent increased use of alcohol, including contacting her GP and referring her to a drug and alcohol service.

    c) Communicated more clearly, and provided more support, for Ms DH to continue to see her children following the decision to prevent children under the age of 18 from visiting the premises due to risks presented by other program residents.

    d) Provided staff with training and practice support regarding the policies and procedures applicable to medication management by residents.

    e) More confidently considered their duty of care to Ms DH when they were unable to contact her in the period proximate to her death even if this meant overriding her staff contact plan.

38. The Mind Review identified the following improvements to be implemented by Mind following Ms DH's death:

    a) Development of a procedure for checking on clients and completing welfare checks in residential services. This procedure ensures that residents are either seen or contacted daily and that, at a minimum, their files have a daily entry.

    b) Development of a detailed Operational and Practice Services Manual for all Mind PRCs.

    c) Development of a handover proforma for staff to inform each other of important information related to residents.

d) A review of rosters to create time for staff to participate in staff meetings to discuss matters such as reviews and allocation of new residents.

e) Development and piloting of new policies, procedures and guidelines relating to drug and alcohol use and support of resident's medication management.

f) Providing a medication awareness session to staff and residents, facilitated by the Clozapine Coordinator of the North West Area Mental Health Service.

g) Consideration of pre-packaged medications as a method of medication storage to prevent sharing or stockpiling of medication.

h) Making the publication *Psychiatric Medication Information, A Guide for Patients and Carers, 4th Edition,* by St Vincent's Hospital and The University of Melbourne, available to staff.

i) Developing and trialling policy, procedure and risk assessment forms within PRCs.

j) Developing a statement regarding visits to PRC sites by non-residents, including minors.

k) Case note training for all PRC staff.

l) Development of family identification processes and family carer assessment procedures, including a plan to identify a resident's carers and/or children.

39. The MHIT advised that, while these improvements should result in improved experiences for PRC residents and their families, many of the changes are basic, and it is unclear why they were not already in place before Ms DH's death.

40. The MHIT also considered Brunswick PRC's decision to prevent Ms DH's children from visiting. Ms DH's pre-entry and transition records show that re-engagement with her children was a major focus of her recovery and was supported by her former partner, her children, and Ms SA. Mind records document an escalation in Ms DH's alcohol use after she was informed of the PRCs decision to deny her children access to the residence, yet there is no evidence that Mind was actively working to resolve this issue.

41. The MHIT referred to advice from Belinda Horton, General Manager of Clinical Practice and Quality at Mind, that efforts had been made to arrange alternative places

for Ms DH and her children to meet. The MHIT advised that, while Mind records indicate that this was planned and that there were some meetings where steps were identified for actioning by staff members, there is no evidence that staff completed these actions. While there is some reference to the potential for Ms DH to relocate to one of the other Mind properties, there is no evidence that she was offered one of those properties, nor is there any evidence that there was an assessment of her capacity to afford this.

42. After considering the second MHIT report, I sought and obtained further responses from both Mind and DHHS which were received in October and November 2017. After receiving this material, in February 2018, I consulted further with the MHIT.

43. The MHIT noted that Mind had put in place strategies to increase resident safety and that these included installing safes in resident's rooms for secure medication storage; education for staff and clients regarding safe use of prescription medication; and a policy to check on residents every day. However, the MHIT advised that these changes *did not address the lack of focus on individual residents and any assessment of their capacity to safely self-medicate*.

44. The MHIT advised that options for prevention included an assessment of a resident's ability to self-medicate safely and noted that there are many examples of assessment tools that are readily available, including tools already promoted by DHHS. The MHIT advised that another option was for residents to be referred to the Medicare funded Domiciliary Medication Management Review (**DMMR**), also known as the Home Medicines Review. According to the Department of Health website, the DMMR seeks to maximise an individual patient's benefit from their medication regimen and prevent medication-related problems through a team approach involving the patient's GP and preferred community pharmacy. It may also involve other relevant members of the patient's health care team such as nurses in community practice or carers.

FINDINGS/CONCLUSIONS

45. I find that Ms DH, late of 253 Victoria Street, Brunswick, died there on 24 June 2016 or 25 June 2016 and that the cause of her death was clozapine toxicity in a woman with cardiomegaly.

46. I am unable to determine whether Ms DH intentionally took her own life or whether she died in circumstances of an accidental overdose, whether seeking some respite from her worries or otherwise.

COMMENT

Pursuant to section 67(3) ***Coroners Act 2008,*** I make the following comment on a matter connected with the death:

1. The support provided to Ms DH by Mind Australia staff was suboptimal and did not meet the standards and procedures Mind Australia had in place at the time of her death.

2. While the completed and planned improvements identified by Mind Australia should improve the safety of residents to an extent by ensuring their medications are securely stored, the implementation of further prevention strategies is warranted.

RECOMMENDATION

Pursuant to section 72(2) of the ***Coroners Act 2008***, I make the following recommendation on a matter connected with the death:

1. I recommend that an assessment of a resident's capacity to safely self-administer medications be incorporated into the Peer Recovery Community admission process.

2. I further recommend that Mind Australia consider referring those residents who do have a capacity to safely self-medicate to the Medicare funded Domiciliary Medication Management Review.

DISTRIBUTION

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

Ms Julie Alcorn, senior next of kin

Mr Patrick Joyce, senior next of kin

First Constable Jeffrey Disken (#40212), Coronial Investigator, Victoria Police

Belinda Horton, General Manager, Clinical Practice and Quality, Mind Australia

Department of Health and Human Services

Signature:

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PARESA ANTONIADIS SPANOS

CORONER

Date: 25 February 2019