Coroners Act, 1996

[Section 26(1)]

Western Australia

RECORDOFINVESTIGATIONOFDEATH

Ref No: 14/13

I, Evelyn Felicia VICKER, Deputy State Coroner, having investigated the death of Charles Edward McDONALD with an inquest, held at Perth Coroner's Court, Court 58, CLC Building, 501 Hay Street, Perth, on 9 – 11 April 2013 find the identity of the deceased was Charles Edward McDONALD and that death occurred on 26 July 2007 at Crisis Care Unit, Hakea Prison, as a result of Acute Drug Toxicity in the following circumstances:

Counsel Appearing :

Ms E Winborne assisted the Deputy State Coroner
Mr M Jenkin (State Solicitors Office) appeared on behalf of the Department of Corrections and Department of Health

Table of Contents

INTRODUCTION

Charles Edward McDonald (the deceased) was a remand prisoner at Hakea Prison (Hakea) located in the Crisis Care Unit (CCU) due to concerns he may self harm. At morning unlock on 26 July 2007 he failed to respond when asked to "show movement" and was then found to be deceased.

He was 38 years of age.

Under Sections 3 & 25 (3) of the Coroners Act 1996 all deaths while a person is held in custody are required to be inquested with a view to examining the supervision, treatment and care of that person while held in custody.

EVENTS SURROUNDING DEATH

In March 2007 the deceased was charged with serious offences and assessed by the State Forensic Mental Health Services in court as requiring a hospital order. As a result the court remanded the deceased in custody to Graylands Hospital (Graylands) under the Criminal Law (Mental Impaired Defendants) Act 1996.

The deceased was admitted to the Frankland Centre (Frankland) at Graylands on 9 March 2007. On 15 March 2007 Dr Schineanu confirmed the deceased's status as an involuntary patient under Section 26 of the Mental Health

[2] Transcript 10.04.2013, pg 116

Act 1996 until 30 April 2007. He advised the court the deceased was suffering from a mental illness which required treatment in an acute inpatient unit and that, in his view, the deceased was not fit to plead. By 30 March 2007 he was considered fit to plead but his treating psychiatrists wished him to remain at Frankland.[2]

On 14 April 2007 the deceased was assessed by Dr Nadarajah as still requiring involuntary status until 10 May 2007.

[2] Transcript 10.04.2013, pg 116

However, on 15 April 2007 Dr Schineanu and the psychiatric registrar, Dr Welburn advised they intended to release the deceased to the community due to a lack of beds in both Graylands and Joondalup, his usual treating hospital. In evidence, Dr Schineanu advised this did not occur but had been considered because the deceased had a known treating psychiatrist at Joondalup. It was considered this would be a protective factor in the event of continued inability to find appropriate accommodation due to his bail conditions and prohibited contact with his family.[3]

On 10 May 2007 Dr Schineanu assessed the deceased as fit to plead but still needed supervised treatment in hospital which he advised the Mental Health Review Board was necessary, "until his mental illness is more stable". Dr Schineanu believed the deceased had improved by 18 July 2007 to the extent he could be treated in Hakea Remand Centre. On that day he was remanded by the court to the Hakea Remand Centre until a court hearing on 10 September 2007.

On the deceased's admission to Frankland he had been on Clozapine 400mg nocte, Olanzapine 20mg nocte, Sodium Valporate 2000, Coloxyl and Senna tablets x 2.

[3] Transcript 10.4.2013, pg 117

The symptoms of his illness included auditory commands to harm himself and others.

By discharge from Frankland to Hakea the deceased's medication had been altered to the extent the Olanzapine had been withdrawn and replaced with Citalopram which was considered to interact less adversely with the Clozapine. He was prescribed Clozapine 100mg mane, 500mg nocte, Citalopram 20mg mane, Sodium Valporate 1000 mane/nocte, with Coloxyl and Senna tablets x 2 and Nicotine patches 14mg/24.[4]

Dr Schineanu advised the court prisoners being discharged to prison are supplied with a prescription for 10 days of clozapine,[5] and 7 days of their other medication. This is because there are such strict prescribing procedures relating to the prescription for clozapine. Clozapine may only be prescribed by an authorised psychiatrist and specific prescribed doctors. Blood tests are required before commencement on clozapine and must be initiated in a hospital environment for appropriate monitoring. Once established on clozapine it is necessary there are full blood assays to monitor the effect the drug is having on the patient's bone marrow and, due to its difficult side effects and interactions, clozapine is only used as a medication of last resort for those patients so severely unwell they are medication resistant to other forms of antipsychotic. By the

[4] Exhibit 1, Vol 1, Tab 3
[5] Transcript 10.04.2013, pg 114

time of his discharge the deceased was not exhibiting psychotic symptoms, however, he was still subject to auditory commands which he was able to resist.

The interim discharge letter from Frankland to Hakea stated his current medications and the fact his next clozapine level and full blood count were due on 31 July.[6]

ADMISSION TO HAKEA

The deceased arrived at Hakea late on the evening of 20 July 2007 from the Frankland Centre. He was assessed at reception and RN Mary Stuart was asked to review the deceased with information from the Mental Health Nurse a new admission was arriving from the Frankland Centre that evening who had been at the Frankland for sometime. RN Stuart was provided with the discharge information from Frankland outlining his medication and the fact he was a potential suicide risk.[7]

RN Stuart found the deceased to be quiet and not very informative during her interview but he did admit thoughts of self-harm from the journey between Frankland and Hakea Prison. He also self reported he had attempted suicide at Frankland in the previous two weeks. RN Stuart decided the deceased should be secured in the CCU safe cell overnight on a high At Risk Management System (ARMS)

[6] Transcript 10.04.2013, pg 118
[7] Exhibit 1, Vol 3, Tab 10

with two hourly observations due to concerns he would act upon his self-harm thoughts.

RN Stuart also sent an e-consult to the on call doctor, Patricia Dare, at approximately 9:00pm asking for an order to continue the medication the deceased had been provided with by Frankland Centre. An order was made for that medication to be continued. Arrangements were made with the senior officer and the deceased was placed in the CCU safe cell overnight with two hourly observations.

It was noted the deceased was recording some elevated observations at the time of his admission which were then monitored daily out of concern for his medication and stress levels. Following three days of intensive monitoring all the deceased's observation returned to normal levels.

As a result of the ARMS rating it was necessary the deceased be re-assessed the following morning (21st) and that was done by Clinical Mental Health Nurse, Ruth Dabell.[8] Prior to seeing the deceased RN Dabell knew the deceased was in prison for the first time and that he was charged with serious offences and was considered to be lonely, had a major depressive disorder and schizophrenia. She found him to be easy to communicate with and he told her he was upset about being transferred to prison. He

[8] Exhibit 1, Vol 3, Tab 34

denied self-harm or suicidal ideation that day and the nurse noted there was no evidence of any current psychosis.

RN Dabell thought it was appropriate the deceased be removed from the safe cell, which is a very difficult environment, and into CCU proper for further monitoring on moderate ARMS with six-hourly observations prior to a decision being made about his permanent placement.

The CCU at Hakea is a small unit with a high proportion of staff to inmates. RN Dabell indicated both the prison officers and the mental health nurses would have the inmates under observations for most of the day and the mental health nurses conduct a thorough assessment everyday by walking around the unit and interacting with prisoners individually. RN Dabell indicated if there had been any concerns about the conduct of the deceased he would have been placed back into a safe cell. At the Prisoner Risk Assessment Group (PRAG) meeting the placement of the deceased in CCU as a moderate risk was confirmed. He was placed in cell H10.

By 22 July 2007, RN Dabell noted in the medical progress notes the deceased appeared settled and was denying thoughts of self-harm. He confirmed feeling isolated, alone

and afraid as a result of the charges he was facing and the difficulties that posed with his family.

While the general impression was the deceased was settling well in the CCU he was still expressing concerns about his prison situation on 23 July 2007 and discussions were had with a view to his future placement. It was decided to have him interact with a peer support prisoner.

The Prison Counseling Service (PCS) first became involved with the deceased on 23 July 2007 and the counselor, Shirley Lizza, confirmed the deceased's feeling of isolation and lack of support. She again recommended the deceased remain on moderate ARMS due to his self-reporting periods of thoughts of self-harm. He did, however, assure her he had no current thoughts of self-harm or suicide and he appeared to engage well with those who communicated with him. He reported his auditory hallucinations to Ms Lizza and confirmed his depression and the fact he did not manage well without his medication.

While not all the ARMS entries[9] indicate a regular six-hourly period between entries, staff in the CCU indicated prisoners are generally under observations for the majority of the time. The entries for 24 July 2007 indicate there were no particular incidents with the deceased and he stayed in his cell reading, although he did come out for lunch. There are

[9] Exhibit 1, Volume 4, Tab 7

a number of "negative" symptoms of his illness through the ARMS form in that he was seen as quiet, fairly sedentary, and tending not to interact a great deal, however, these are symptoms of his illness and are not considered to be overly concerning, especially when he did respond appropriately to direct communication.[10]

The medical records indicate the deceased was taking his medication without complaint while in CCU and appeared to be compliant with any requests made of him with respect to ensuring medication consumption. There are procedures in prison for prisoners to take any oral medications when dispensed by a nurse in front of prison officers, who then check they have not secreted, or failed to swallow their medication. While no one specifically recalls the deceased there has been no indication he was non compliant with medication and he appeared to value his medication in any event. I do not believe there was an issue in this case of the deceased either secreting or misusing his mediction.

The CCU is comprised of the wings containing the inmate cells, a control room and the day area where there is the ability to boil kettles and make hot drinks as well as store cool drinks. Coffee and tea are freely available to inmates when they are not in lockdown. Prior to lockdown at about 6:00pm prisoners are encouraged to make themselves a drink and take it into their cells with them. There is no

[10] Dr Schineanu 10.04.2013, pg 110

restriction on prisoner access to coffee or tea, nor are prisoners restricted from purchasing drinks containing caffeine.

With respect to cigarettes these can be freely purchased within the prison system both legitimately, and by way of trade, and there is no restriction other than financial. In the event a prisoner does not have access to cigarettes and is desirous of withdrawing from smoking, nicotine patches can be prescribed. In the case of the deceased it had been noted on his reception at Hakea he did not have nicotine patches with him but he did not seem to be particular concerned.

25JULY2007

The 25 July 2007 was a busy day for the deceased from the perspective of input by the prison. He was seen as settling quite well into the prison routine and in the morning he had his second review with the PCS. Ms Lizza recorded in his ARMS file,

> "engaged quite well with PCS. He is having phone contact with his wife. Appears quite settled Recommended remain on ARMS (moderate) while deciding on placement".

She believed he was still quite vulnerable, but was engaging well with people although he still seemed quite apprehensive about his circumstances. While Ms Lizza was not really concerned about him self-harming, she was concerned at

his apparent vulnerability and asked the CCU staff to continue observing and monitoring his mood or demeanor. Evidence was heard from two of the CCU prison officers. Prison officers applying for, and accepted into, roster work in CCU are selected for their empathy and welfare attitude. The deceased was anxious to move into main stream prison but Ms Lizza was concerned this would not be as suitable a placement for him at that time.

The deceased spent time with a Peer Support Prisoner following Ms Lizza's concern he would not adapt well to mainstream. That peer support prisoner informed the senior officer it was his view the deceased would integrate quite well into the unit considered for his placement on leaving CCU. The deceased advised the senior officer he similarly felt less apprehensive and more comfortable about moving into mainstream after meeting with the peer support prisoner.

Also on 25 July 2007 the deceased was reviewed by Dr Hames, General Practitioner, to review his medical situation.

Dr Hames was aware of the deceased's medical history and reviewed the medical information available with the deceased. He was aware of the prescription for clozapine and the discharge letter from Frankland outlining that the deceased needed a full blood count on 31 July 2007.

Dr Hames wrote the requisite request.[11] Dr Hames noted the deceased had been on strict observations for the first three days of his admission due to concerns with his blood pressure. However, by the time Dr Hames reviewed the deceased he was satisfied the deceased was showing no apparent signs of cardiac compromise or any other observations to cause him concern the deceased was in need of medical input over and above that he was already receiving by way of his medication prescribed by Frankland.

Dr Hames reviewed his notes and confirmed it was his understanding the deceased told him he smoked a packet of cigarettes a day, however, Dr Joyce noted the entry is a little ambiguous. It could mean there was an intention to fill out the number of cigarettes but that it had not been completed. The deceased did not ask Dr Hames for a prescription for nicotine patches and it does not appear he was in receipt of them in prison.

Dr Hames stated he was not concerned with the deceased smoking, or giving up smoking, in that in prison prisoners are usually encouraged by medical staff to abstain from smoking in view of the fact it is of benefit to their health. It would not occur to him to be concerned about a prisoner not smoking. Similarly, Dr Hames did not concern himself with a prisoner's coffee or caffeine intake. It was not something he was aware was of concern in prisoners

[11] Transcript 9.04.2103, pg 21

prescribed clozapine. Clozapine mediction is relatively rare in the prison environment due to the strict prescribing requirements[12] and the detail with respect to interactions with other substances are not well known and generally left to the prescribing psychiatrist.

Overall, there were no concerns raised by any person who interacted with the deceased during 25 July 2007 in CCU and he certainly had considerable input on that day from different parties.

OVERNIGHT 25–26JULY2007

Hakea CCU is a manned unit over-night and the prison officer on roster that night was Justin Thornton. Prison Officer Thornton was relatively new and believed he may still have been on probation. In evidence he commented it may have been his first night shift in CCU and he cannot recall any problems. There had been a prisoner causing some earlier disturbance in the safe cell. His ARMS rating was 'high' risk and he required two hourly observations. Officer Thornton said he checked all of the prisoners on ARMS at two hourly observations to fit with the one in the safe cell.[13]

Neither Prison Officer Fleet rostered in CCU during that day 25 July 2007, or Officer Thornton overnight in CCU, were

[12] Transcript 9.04.2013, pg 24
[13] Transcript 9.04.2013, pg 32

aware there was a problem with the recording of the CCTV footage in CCU at that time. They recalled the cells could be monitored and that no alarm sounded to indicate the monitor was not recording.

The prisoner in the safe cell noted he was making a fuss earlier in the evening and he recalled an occasion when he looked over to Cell H10 and saw a nurse with a back pack speaking with the occupant of that cell. He did not know the occupant of that cell but certainly saw a nurse interacting with the occupant.[14]

Officer Thornton explained the officer rostered overnight in CCU did not have access to the cells, and in the event it was necessary to attend in the cell, the requirement was contact would be made with the night recovery team who would come to the unit and attend while any cell was accessed. This is a security policy decision operative throughout the prison. Prison officers are not intended to access any cell without an escort.[15]

The night checks required an observation of the prisoner within the cell but were generally a body count to ensure there was a prisoner in the cell. On each occasion Officer Thornton observed the deceased, he recorded him as

[14] Exhibit 1, Vol 3, Tab 7 para 7,8,20
[15] Transcript 9.04.2103, pg 30

appearing to be asleep and that is recorded in the ARMS assessment for the deceased.[16]

Overall, Officer Thornton noticed nothing over night of concern in the CCU and noted nothing of concern during his observations of the deceased other than he "appears asleep".[17] The last check conducted by Officer Thornton was at 6:00am on 26 July 2007 when he has recorded the deceased again "appears asleep". At the conclusion of his shift he handed over to the oncoming prison officers Peter McDonnell and Salvadore DiGrandi.

UNLOCK26JULY2007

There was nothing of concern in the hand-over and at approximately 7:35am on 26 July 2007 the two officers began the general unlock of the CCU. This consisted of a prison officer moving down each side of the wing, unlocking cells and requiring a response from prisoners as they did so. Prison officer McDonald unlocked cell H10, the deceased, and called out to him. When he received no response he entered into H10 and walked to the head of the bed. Officer Di Grandi was at the door having moved there due to officer McDonnell moving into the cell.

Officer McDonnell put his hand on the deceased's upper left arm and shook him but received no response. He felt that

[16] Exhibit 1, Volume 4, Tab 7
[17] Exhibit 1, Volume 4, Tab 7, Transcript 9.04.2103, pg 31

the deceased was cold, stiff and grey in colour.[18] He also observed what appeared to be blood on the deceased's pillow and called out to Officer Di Grandi to obtain "the medic".

Officer Di Grandi then ran to the medical centre because it was next door and the quickest way to obtain assistance. Officer O'Donnell moved out of the cell behind Officer Di Grandi to go to the control room to let Officer Di Grandi through the doors into the medical centre, while he called a Code Red. He also ordered the three prisoners who had already been unlocked to re-attend their cells.

Prison Officer McDonnell then re-entered the deceased's cell and went to the head of the bed closely followed by Clinical Nurse Fiona Mitchell, and Ms Hubbard, Prison Duty Manager who had responded to the Code Red, being outside CCU when it was called.[19] RN Mitchell satisfied herself the deceased was dead and no one instituted CPR because it was obvious it would not be appropriate.[20]

It was clear the deceased had been dead for some hours.

The cell was sealed and the police investigation commenced.

[18] Exhibit 1, Volume 4, Tab 18
[19] Exhibit 1, Vol 4, Tab 30
[20] Exhibit 1, Vol 4, Tab 28, pg 11

POSTMORTEMEXAMINATION[21]

The post mortem examination of the deceased was performed by Dr KA Margolius, Forensic Pathologist, Pathwest.

Dr Margolius initially attended the scene of the deceased's death at Hakea CCU Cell H10 on 26 July 2007 and noted the deceased was located face down on his mattress with blood staining around his nose which had seeped into the mattress. His arms were under his body with his fingers clenched. Lividity was consistent with the position in which he had been originally located and the staining noted to be purging fluid, was also on a pillow beside the bed at the time of Dr Margolius' examination of the scene.

An internal post mortem examination on 30 July 2007 Dr Margolius noted petechiae over the anterior surfaces of the heart in keeping with the deceased's position on discovery, and on the visceral surfaces of the lungs. The deceased had pleural infusions, pulmonary oedema and cerebral swelling. No pathology of the organs was noted although the myocardium was observed to be pale and "slightly flabby" with the "chambers of the heart dilated". There was no obvious reason for the death from the post mortem examination.

[21] Exhibit 1, Vol 3, Tab 18 & 19

Toxicology was undertaken and revealed therapeutic levels of valproic acid and Citalopram. The deceased's caffeine levels were excessively high and clozapine was in the fatal range. Clozapine is known to cause central nervous system depression.

Dr Margolius provided a cause of death as Acute Drug Toxicity due to the level of Clozapine in the deceased's system at the time of his death.

Dr Margolius was unable to give evidence at the inquest.

Dr Moss, also of Pathwest, reviewed Dr Margolius' histology for the purposes of the inquest. He had specifically been asked to review the heart and liver findings with a view to assisting the court consider liver and cardiac function and their relevance to the toxic levels of clozapine and caffeine.

Dr Moss found only very mild fatty change in the slides of the liver, with no evidence of acute or chronic abnormalities in the samples taken. In respect of the heart, again Dr Moss could find no significant abnormality. There were some cells with enlarged nuclei, but no obvious corresponding cardiomegly. There were some inflammatory indicators but not to the extent which would support significant inflammation in the samples reviewed and there was no evidence of acute infarction or wide spread

myocarditis or significant fibrosis.[22]

Dr Moss felt unable to comment on Dr Margolius' description of the "pale and slightly flabby" myocardium from the histology. He considered the dilation of the heart chambers raised the possibility of dilated cardiomyopathy but was not able to support that on any of the known clinical indicators. Dr Moss indicated the lung finding would support a degree of heart failure but it was impossible to determine whether this was due to the process of death or pre-existing cardiac dysfunction.[23]

Overall the findings did not support a long period of decline prior to a terminal event.

THEEVIDENCEOFDRJOYCE

Dr David Joyce practices in the areas of clinical pharmacology and toxicology. He provides extensive advice and analysis of drug interactions, pathology and symptomology. His advice was sought in this matter to assist the court in attempting to determine the likelihood of an intentional drug overdose or accidental poisoning due to metabolic, system or other dysfunctions.

The court had heard evidence from Dr Schineanu, clozapine was an antipsychotic medication used in serious cases of

[22] Exhibit 2, Transcript 10.04.2103, pg 128-129
[23] Exhibit 2, Tab 3

psychotic illness where other medications had proved unsuccessful. It was not generally the anti-psychotic mediction of choice due to its serious side effects which need to be closely monitored. It is necessary patients requiring clozapine be extensively investigated both before and during the commencement of clozapine therapy. It is a medication which can only be prescribed by a psychiatrist or specifically accredited doctor. Its therapy must be started in hospital with prescribed monitoring. There after full blood counts as well as blood levels of clozapine are required for continued prescription. Part of this is due to its toxicity to the bone marrow and the effect that may have on a person's well being and health.

The deceased experienced significant auditory command hallucinations which directed him to kill or harm people close to him and had been prescribed clozapine, in the community, following admission to Joondalup Health Unit, since 2006.[24]

On admission to Frankland in 2007 his psychosis was not well controlled, even using clozapine, and it was decided it was necessary to increase his dose. In order to do this his other anti-psychotic, olanzepine, was gradually withdrawn and replaced with an anti-depressant, citalopram. Both those drugs interact with clozapine but citalopram to a lesser extent. By replacing the olanzepine with the anti-

[24] Transcript 10.04.2013, pg 103

depressant citalpram it was expected the levels of clozapine would be elevated, in addition to the increased dose of clozapine, but not to the extent as seen with other anti-depressants.[25]

Dr Schineanu advised he was aware of an additional interaction of caffeine and smoking on clozapine levels, but it was not an unmanageable situation in a hospital setting. In Frankland patients' access to both caffeine products and tobacco products can be limited. He agreed such restriction would be unmanageable in a prison setting[26], however, at the time the deceased was transferred from Frankland to Hakea he had been commenced on nicotine patches, Dr Schineanu thought for mostly financial reasons,[27] and the cessation of smoking was believed to have been accommodated in the elevated levels of clozapine in the deceased's blood results, last taken on 3 July 2007. Dr Schineanu said the elevated clozapine levels, following increased clozapine, commencement of citalopram and the cessation of smoking, with controlled caffeine, was as expected by his treating physicians and he considered the deceased's clozapine level to be stable at the time of transfer to Hakea on 20 July 2007.[28]

[25] Transcript 10.04.2013, pg 107
[26] Transcript 10.04.2013, pg 108
[27] Transcript 10.04.2013, pg 108
[28] Transcript 10.04.2013, pg 109-11

Dr Schineanu expected another blood test to be taken on 31 July 2007 and considered that would be sufficient to monitor the expected interactions.

Dr Carbon, Director of Health Services, Department of Corrections, indicated she considered the deceased's clozapine levels to be rising, without proper information about the known interactions to the prison doctors.[29]

Dr Schineanu expressed some surprise the level of smoking reported by the deceased would have a significant effect on his clozapine levels;[30] while the literature, as reported by Dr Joyce, indicated a significant, 2½ to 3 fold, impact for that level of smoking. It would also be unusual for patients requiring medication by clozapine to seriously consider cessation of smoking so it was not something experienced in practice at Frankland.

The increase in clozapine levels with cessation of smoking is not due to the nicotine content so is not affected by the use of nicotine patches.[31]

Dr Joyce reviewed all the medical information available with respect to the deceased before his transfer to Hakea Prison on 20 July 2007. He then reviewed all the information surrounding the deceased's transfer and the conditions in

[29] Transcript 11.04.2013, pg 182
[30] Transcript 10.04.2013, pg 110
[31] Transcript 10.04.2013, pg 152, Exhibit 1, Vol 3, Tab7, pg 10

CCU at Hakea. Dr Joyce was of the view the cessation of smoking and the unlimited access to caffeine containing products in CCU was sufficient to explain the toxic levels of clozapine and caffeine seen at post mortem examination of the deceased. He considered the effect of the interaction with citalopram to be the least significant contributor to the high levels.[32]

Dr Joyce explained the interactions relate to the pathway of elimination of clozapine from the body by the liver cytochrome P450 2A1. Smoking stimulates the activity of P450 2A1 and both caffeine and clozapine compete with each other for P250 2A1 to eliminate them from the liver. A reduction in smoking reduces the activity of P450 2A1 which reduces its availability to remove those two substances from the system and so increases their levels in the body.[33]

High levels of both clozapine and caffeine in the liver are toxic and can be lethal. The pathways to lethality can be varied and occur with either deteriorating cardiac and liver function or suddenly by way of cardiac rhythm disturbance or seizures.[34] Dr Joyce considered the post mortem findings were consistent with clozapine poisoning, but the sudden death over night without some prior deterioration was still surprising in the absence of intentional overdose.

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[32] Transcript 10.04.2013, pg 152
[33] Exhibit 1, Vol 3, Tab 7
[34] Transcript 10.04.2013, pg 150 & 162

However, the reality appears to be that if the deceased had managed to secrete his entire dosage[35] since arrival at Hakea, of which there is no evidence and I find to be very unlikely, and taken it all on the evening of 25 July 2007, that alone would not account for the levels seen post mortem.[36]

This implies, with the post mortem finding of no obvious cardiac or liver dysfunction, and no clinical signs of toxicity by way of abnormal observations or excessive salivation, the death of the deceased was most probably a sudden death by way of cardiac arrthymia as a result of the elevated levels of clozapine due to competition with now unrestricted caffeine for the available P450 2A1 as a pathway to elimination from the deceased's system.

While this can be explained post mortem from the available evidence, in Dr Joyce's view it was "barely foreseeable in prospect"[37] and the same set of circumstances in another patient may not result in a sudden death as seen in this case.

CONCLUSIONASTOTHEDEATHOFTHEDECEASED

I am satisfied the deceased was a 38 year old male remand prisoner in Hakea CCU due to concerns he would self-harm.

[35] Transcript 10.04.2013, pg 120
[36] Transcript 10.04.2013, pg 150 and Transcript 10./04.2103, pg 120
[37] Transcript 10.04.2013, pg 166

He suffered a significant degree of mental illness by way of schizophrenia and had spent a long period of time in Frankland Unit of Graylands Hospital being stabilised in preparation for what was inevitably going to be a serious change in his life circumstances.

The deceased was apprehensive of these changes but was cooperative with authorities in communicating his concerns and compliant with medical interventions necessary to minimize his psychotic experiences.

Dr Schineanu advised he was concerned the deceased's medication on admission to Frankland was not sufficient to control his illness and needed to be adjusted, with the addition of an anti-depressant to accommodate his changed circumstances.

Clozapine had proved successful with the deceased, he was compliant with its administration and the interventions necessary for its continued prescription. His dose was increased with necessary adjustments taking into account its interaction with other medication and the cessation of smoking which was not understood to be as significant as some of the current literature now suggests.

The deceased was educated about interactions between clozapine,[38] citalopram, smoking and caffeine, and his blood

[38] Transcript 10.04.2013, pg 113

levels of clozapine and citalopram monitored to ensure the expected adjustments to their levels as a result of changing doses were as expected. Dr Schineanu believed any adjustment for the cessation of smoking, and addition of citalopram would have been reflected in the blood results seen for 3 July 2007. He was aware the interim discharge letter to Hakea from Frankland would specify the date for the next blood tests as 31 July 2007, and was confident the Hakea medical staff would ensure it was done.

Additionally, the deceased could not be prescribed more clozapine until a psychiatrist had reviewed the 31 July 2007 blood results. Hakea was only provided with a 10 day prescription for the deceased.[39]

While caffeine is restricted in Frankland, but freely available in Hakea CCU the deceased understood it's potential for interaction, however, it is unlikely he would consider just how significant that change might be when confronted with all the other aspects of the circumstances of his transfer. In hindsight, it seems logical a person medicated to the extent the deceased required medication, may drink excessive amounts of coffee for many reasons. What was not foreseeable was that there would be a fatal outcome, without some indicators, which those interacting in a CCU would have observed.

[39] Transcript 10.04.2013, pg 114

I am satisfied the situation in the Hakea CCU is such the staff, both medical and security, would have observed signs of difficulty had there been any before the fatal outcome in this case.

I am also satisfied the deceased did not secrete his medication and try to overdose. All the evidence indicates he was compliant with his medication regime, the post mortem results do not support that type of overdose, and the deceased was naive to non-compliance while the prison officers in CCU are not.

I am satisfied this was a sudden and unexpected death due to clozapine toxicity arising out of the confluence of all the factors in the deceased's circumstances at that time.

Having been restricted in his caffeine in-take while in Frankland I am satisfied the deceased over compensated on arrival at CCU Hakea by drinking more caffeine containing products than he had before. That, in combination with his medications, cessation of smoking and probably increased stress caused a fatal cardiac arrhythmia once the deceased had retired for the night on 25 July 2007, probably with "a brew" for after lock down.

The evidence of another prisoner in the safe cell indicates [40] the deceased spoke with a nurse after lockdown, probably

[40] Exhibit 1, Vol 3, Tab 17

during her night medication round. There is no record of any concern being raised at that time. There after he went to sleep and died sometime in the earlier hours of 26 July 2007, while still in bed, and without raising an alarm. The CCU is manned overnight and any cell call would have been responded to had there been one.

Prison officer Thornton noticed nothing of concern on his checks over night as the deceased appeared to be in his bed and asleep. These checks were two hourly although that was not the requirement for the deceased.

The deceased was not recognized as having passed away until there was a requirement he show movement for prison officer Donnelly on unlock at about 7:35am on 26 July 2005. He did not and a Code Red was called. The deceased was well beyond resuscitation by that time.

I am satisfied death occurred as a result of a clozapine induced arrhythmia but there is no evidence of an intentional overdose.

I find death arose by way of Misadventure.

COMMENTS ON THE SUPERVISION, TREATMENT AND CAREOFTHEDECEASED

It is clear from the evidence not all medical and health

practitioners are aware of the extent of drug interactions with other substances more freely available in a prison setting than in a psychiatric hospital. This is understandable, but taking into account the high numbers of those with mental health issues requiring medication in prison it is desirable a prisoner-medical-practice develop an effective alert system to assist medical staff in managing these prisoners/patients.

I accept clozapine is rare in the prison environment, and its prescription is such necessary testing is carried out to properly monitor its use, and was in place for the deceased. However, I understand Dr Carbon's concern there could be more information divulged between prescribing psychiatrists and medical carers in the prison setting.

I do not believe more could have been done in the case of the deceased than was done in view of Dr Joyce's evidence, but note, now there is an awareness of the effect of the cessation of smoking and consumption of caffeine in patients prescribed clozapine, there needs to be some education of prison medical staff to reinforce education of prisoners of the need for care. If Dr Carbon believes knowledge of prisoner blood levels of clozapine will assist in this regard there needs to be some negotiation with prescribing psychiatrists and perhaps prescribing authorities as to the difficult circumstances facing medical practitioners in a prison environment.

In all the circumstances of this case I believe the supervision, treatment and care of the deceased was adequate and he was appropriately cared for when considering his difficult circumstances in a prison environment.

There are some recommendations which arise relating more to the need for there to be good communication between prison authorities managing prisoners with serious mental illness.

RECOMMENDATIONS

Recommendation 1

Patients on clozapine who are returned to the Department have a formal handover to the treating psychiatrist at the relevant custodial facility. The handover should include a comprehensive report of the previous and current management of the patient's clozapine therapy including:

All dosage changes during their inpatient care;

All changes in relevant drug and lifestyle changes which are likely to impact on clozapine levels;

All clinical screening completed during this time; and

All clozapine blood levels;

Clinical parameters, including physical examination findings, relevant to clozapine management at the time of their transfer to the Department.

Recommendation 2

Department of Corrective Services educate their medical and mental health staff about specific interactions between clozapine, caffeine and the cessation of smoking not counter acted by the use of nicotine patches.

Recommendation 3

Department of Corrective Services review care of clozapine patients and consider who can usefully ask questions of patients about their caffeine use in the same way patients are currently asked to provide information about their smoking habits.

EF VICKER
Deputy State Coroner

30 May 2013