IN THE CORONERS COURT
OF VICTORIA
AT LATROBE VALLEY

Court Reference: COR 2010 003560

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
*Section 67 of the **Coroners Act 2008***

Inquest into the Death of KAREN A MOORE

Delivered On:	11 December 2017
Delivered At:	Latrobe Valley Coroners Court
Hearing Dates:	10 December 2014
Findings of:	Karen Ann Moore
Representation:	Doctor S. Keeling appeared on behalf of Doctor T Norwood
Counsel Assisting the Coroner	Leading Senior Constable M Kuyken

I, F A Hayes, Coroner, having investigated the death of KAREN ANN MOORE

Having held an inquest into the death of Karen Ann MOORE

AND having an inquest in relation to this death on 10 December 2014

At Coroners Court at Latrobe Valley

find that the identity of the deceased was KAREN ANN MOORE

born on 23 May 1961

and the death occurred 13 September 2010

at LATROBE REGIONAL HOSPITAL PRINCES HWY TRARALGON 3844 VIC

from:

1a BRONCHOPNEUMONIA

1b HYPOXIC BRAIN INJURY

1c COMBINED DRUG TOXICITY (OXYCODONE AND DIAZEPAM)

Pursuant to Section 67(2) of the Coroners Act 2008, an inquest into the death was held and the deceased was not immediately before the person died, a person placed in custody or care; but there is a public interest to be served in making findings regarding the following circumstances:

Karen Moore was aged 49 years when on 11 September 2010, she was found unconscious at her home by her partner Norman Dawes. She was transported to the Latrobe Regional Hospital, but did not regain consciousness and passed away on 13 September 2010.

The hospital admission notes reveal that Ms Moore was brought in by ambulance having been found unconscious at home. Cardiopulmonary resuscitation (CPR), for approximately an hour, revived Ms Moore, but she did not, at any point, regain consciousness. The hospital notes contemplate a drug overdose as being the cause of Ms Moore's cardiac arrest, but no drug screen was performed due to lack of urine output.

An autopsy was performed by Doctor Michael Burke, Senior Pathologist at the Victorian Institute of Forensic Medicine, (VIFM), who formulated the cause of Ms Moore's death as "Bronchopneumonia", "Hypoxic brain injury" and "Combined drug toxicity (Oxycodone and Diazepam)". Doctor Burke found no evidence of injury or primary natural disease which would have led to Ms Moore's death. He did find evidence of prior illicit intravenous drug use.

Ms Moore had an extensive medical history and was being treated by Doctor Terence Norwood. Ms Moore experienced chronic pain due to a degenerative back condition and also suffered from depression, emphysema, hepatitis C and pain resulting from injuries sustained in a motor vehicle incident some years earlier.

Ms Moore was prescribed Oxycontin and Diazepam. She was also said to be heavily reliant on panadeine. Ms Moore had a history of illicit substance abuse and had previously been on a methadone program. Ms Moore was said to be dependent on opiates.

Doctor Terence Norwood had been Ms Moore's General Practitioner (GP) since 2001. In his statement, he states that she "suffered from chronic cervical pain and headaches with x-ray evidence of cervical degeneration. She was treated with Oxycontin for her cervical pain, treatment which was supported by Doctor Janovic at Caulfield Pain Management". From 2006, Ms Moore was prescribed 240mg of Oxycontin per day – to be taken by 2 x 40mg tablets, three times a day. Doctor Norwood outlines that initially, Ms Moore picked up her medication from the pharmacy each day, but that the pharmacy in Morwell ceased providing this service, from which time, Ms Moore's medication was prescribed in weekly amounts.

Doctor Norwood stated "Karen was a difficult patient to get to adhere to her prescribed dose and at time (sic) she had other medical problems that contributed to this (eg. Pancreatitis in 2006)".

The records from the Latrobe Regional Hospital reveal that from 5 June 2009 to, and inclusive of the admission just prior to her death, Ms Moore was admitted to hospital for overdoses on eight occasions. They were as follows:-

(1) 5 June 2009: brought in by ambulance, found unresponsive at home. Revived by ambulance officers. Patient stated ingested approximately 6 x panadeine forte, 6 x panadeine, valium x 6, Oxycontin x 8, to manage chronic head, neck and back pain. She was discharged after observation, with a letter to her GP for follow-up. That letter includes the following notations "please note that the patient is on significant amounts of prescription opiates. Please also note that during her presentation the patient and her husband were found in the hospital bathroom with various medications, spoons and syringes".

(2) On 4 November 2009, Ms Moore was brought in by ambulance after being found unresponsive at home. She was revived by ambulance officers. She was diagnosed with opioid overdose and aspiration pneumonia and discharged on 10 November 2009. Hospital had discussion with GP re prescription rate. Restarted on Oxycontin – 40mg BP. Follow-up organized with GP for review of medication. Ms Moore underwent psychiatric review – no acute risk identified.

(3) On 3 December 2009, Ms Moore was brought in by ambulance after having been found unconscious at home. Revived by ambulance officers, diagnosed with overdose of intravenous Oxycontin and Valium. She was discharged on the same day, with referral to drug and alcohol services through Latrobe Community Health Centre.

(4) On 9 April 2010, Ms Moore was brought in by ambulance after having been found unconscious at home. Ms Moore was revived by ambulance officers and admitted to hospital. Diagnosed with "likely drug overdose". Discharged home on 10 April 2010, with follow-up letter to Doctor Norwood. Ms Moore stated to treating doctors that she was no longer seeing Doctor Norwood and gave name of non-existent doctor. Letter to Doctor Norwood from Doctor Paspalian, the emergency department medical officer, stated "could you supervise her drug use as this is the second time in four months she has ended up intubated".

(5) On 16 April 2010, Ms Moore was brought in by ambulance after being found unresponsive at home. Revived by ambulance officers. Diagnosed with suspected Opiate and Valium overdose. A drug screen returned positive results for Cannabis, Opiates and Benzodiazepines. Ms Moore claimed the overdose was accidental, as had forgotten that she'd taken an earlier dose of her prescribed medications. Ms Moore underwent a psychiatric assessment on 17 April 2010. No imminent risk issues were identified but referrals were made for neuropsychological and occupational therapy follow-up due to suspected acquired brain injury. Discussion held with family about managing access to paracetamol. Discharged 17 April 2010. Ms Moore again gave the name of a fictitious doctor in Narre Warren as her treating medical practitioner.

(6) On 4 August 2010, Ms Moore was brought in by ambulance having been found in an unconscious state. Intubated and admitted to hospital. Diagnosis of overdose of prescribed medication – Oxycontin, Valium and Imovane. Discharged home on 6 August 2010. Letter sent to Doctor Norwood from Community Mental Health Service advising that she had been admitted for drug overdose. No ongoing psychiatric concerns.

(7) On 2 September 2010, Ms Moore was brought in by ambulance following an overdose of Oxycontin. She was unconscious on ambulance arrival, with her husband performing CPR. She was assessed as a low suicide risk, reviewed by psych services and discharged on 3 September 2010. Ms Moore discharged herself from the Emergency Department on 2 September 2010 and was returned by police two hours later. A mental health treatment plan was prepared, part of which was to review her medication regime with her GP. Ms Moore's reason for the overdose was to manage her "significant pain". She stated that she took an extra Oxycontin tablet, plus two Neurofen every hour for six hours. Ms Moore conceded that she regularly exceeds the dosage of her prescriptions and runs out before she next sees her doctor.

The records of the Latrobe Regional Hospital reveal a total of seven hospital admissions, prior to the last one, there being a total of eight admissions for overdosing on her prescribed medication.

The regular reviews by psychiatric services found no evidence that Ms Moore was attempting to kill herself, but that she was overdosing to manage her pain. In addition, it was suggested that she "presents with long and short term memory deficits and is a poor historian, had poor insight and poor judgement". (Community Mental Health Service letter to Doctor Norwood, 13 August 2010).

The hospital records indicate that the hospital communicated with Doctor Norwood on four occasions in relation to her overdoses (5 June 2009, 4 January 2009, 9 April 2010 and 4 August 2010). On two other occasions, Ms Moore provided the name of a fictitious doctor, therefore no follow-up could be made, although attempts were made to find that doctor.

Doctor Norwood provided two statements to the Court. In his report dated 18 July 2011, Doctor Norwood states that his first awareness of an overdose in relation to Ms Moore was on 9 June 2009 by letter from the hospital. A colleague at the same clinic had changed her prescription from 40mg tablets (1-2) three times a day, to 80mg tables, three times a day. Doctor Norwood stated "I believed that the issuing of the higher strength tablets was the probable cause". He confirms that he was advised by the hospital of "possession of possible IV drug using paraphernalia". In relation to this, Doctor Norwood states "although I do not doubt that Karen occasionally used IV drugs, I did not believe that she was an habitual IV drug user".

Doctor Norwood states that he was made aware of a further overdose in November 2009, but not of the overdose in December 2009.

Doctor Norwood states that Karen presented frequently seeking additional tablets if she had overused. On those occasions, Doctor Norwood stated that "I was prepared to make up a shortfall if Karen overused her tablets". However, he states that from the end of 2009, he was no longer prepared to provide prescriptions to make up for overuse and instead "I made Karen aware and reinforced many times that she needed to stick to her dosage". On 21 December 2009, he reduced her monthly dosage allocation. Ms Moore presented early on 29 April 2010, having overdosed earlier that month, seeking additional medication, which was refused by Doctor Norwood. He states that they had also agreed to a plan to "considerably reduce her Benzodiazepine intake from July."

Doctor Norwood states that he was next made aware of any overdose in August 2010. He stated that:-

> "On the previous consultation to this, Karen had complained of insomnia (probably due to reducing Benzodiazepine) and I prescribed her a non Benzodiazepine Hypnotic (Imovane). I questioned Karen very carefully after this overdose and the apparent explanation for it was the use of Imovane, which was abruptly ceased".

Doctor Norwood states that he last saw Ms Moore on 6 September 2010 at which time he prescribed her usual dosage of Oxycontin and Diazepam as part of a reducing regime. Ms Moore overdosed five days later. Doctor Norwood stated "Mathematically she was only likely to have had two days of Oxycontin and a few of her own Diazepam, may mean she accessed medication elsewhere".

Doctor Norwood states his understanding that although "reviewed by hospital psychiatric services as an inpatient, Karen was not considered requiring psychiatric follow-up and was referred back to myself." He also stated that "Although Karen had had not seen a pain management specialist for a long time, she would have been referred to a specialist for review as a condition of her permit".

Doctor Norwood ends his report with the following summary:- "Having reviewed her management, I have considered what other options were available to prevent this tragedy. Daily dispensing may have assisted but it is not available in Morwell and I believe Karen was reliant on others for transport, which made daily pick-up outside of Morwell problematic, reducing or ceasing her analgesia which I believe would have caused her to suffer ongoing pain. Commencing her on a Methadone Program would also have been an option but this also was logistically difficult given her living in Morwell and I doubt at the time that there were any places on the program in Morwell as I have had other patients waiting for places and visiting other towns. Despite all of these options, if Karen had shown a preparedness to seek opiates elsewhere, I doubt that any of those options would have saved her".

Doctor Norwood's clinical notes support his assertion that he was attempting to reduce the dosage of Diazepam prescribed for Ms Moore. However, that reduction is short lived in that the number of tablets prescribed for the prescription period drop from 50 each month (November, December) to 25 for the month of Feb 2010. No further Diazepam was prescribed until 5 July 2010, when 50 are again prescribed, followed by 40 prescribed on 8 August 2010 (for pickup on 23/8/10), and again 40 on 9 August 2010. 40 were again prescribed on 5 September 2010 and again on 6 September 2010 (for pickup on 20/9/10). No repeats were provided for. Therefore, Ms Moore was able to access the full amount of Diazepam for the prescribed period. Ms Moore appears to have been on a fortnightly regime in relation to her Diazepam, but was still able to collect 40 tablets on each occasion.

In his evidence at the inquest, Dr Norwood explained that the authorization process for prescribing oxycontin limited the amount he could put in any one prescription to 20 tablets. This number was later increased to 28. It was his practice, he stated, to write two prescriptions, with 2 separate dates, which would allow Ms Moore to fill the two prescriptions on two different days. One of the prescriptions was pre-dated, usually to one day later than the first prescription. That's why there are so many filled prescriptions one day after the other. However, Dr Norwood stated that he ceased that practice on the advice of his medical colleagues. Instead, he adopted their suggested practice of writing a script for one week, with repeats. This could only be done if Medicare authorized such prescriptions. However, shortly before Ms Moore's death, the prescriptions reveal that Ms Moore was still able to obtain Diazepam in substantial amounts, with the "two prescription" method.

Although Dr Norwood stated that he had moved to prescribe Oxycontin on a weekly basis, with repeats, he conceded in his evidence that there were still pre-dated scripts being provided as well, to make up the full amount. He justifies this continued practice as him trying to get used to the authority regime.

In October 2009, Dr Norwood attempted to include some limitations on the access to drugs by specifying the day for pick up and the chemist from which the medications are to be picked up. However, those changes were shortlived, and did not become a permanent feature of the prescription regime for Ms Moore. In addition, it was clear that Ms Moore was able to fill the prescriptions for Oxycontin within 2 or 3 days of each other and that was what she was doing.

Dr Norwood also described Ms Moore presenting at his Yinnar clinic, with an injured foot, having run out of her Oxycontin and seeking more. Although he was troubled about the fact that she had already run out of her allocated dose, he prescribed her more. She then overdosed within days. Dr Norwood agreed that she came to see him shortly after, but that he was unaware of the overdose.

Dr Norwood was unable to provide an explanation for some of the prescriptions said to have been created by him. They were dated on Saturdays or Sundays, when he stated that he did not work. There was also no corresponding consultation where they may have been pre-dated.

In relation to the apparent cessation of prescribing Diazepam, from February 2010 until 5 July 2010, Dr Norwood stated to the Court that he had most likely privately prescribed Diazepam for Ms Moore, which was done outside of the PBS Scheme. This method was more costly to Ms Moore, as the PBS subsidy did not apply. He said that he did this so that he could encourage Ms Moore to accept a lesser dose, if he placed her back on the PBS Scheme, which she agreed to in June 2010. It appears from his evidence that he was prescribing 100 Diazepam in those private scripts. It is then in August 2010 that the prescriptions reduce from 100 to 80 (with two prescriptions for 40 tablets each). Of his prescriptions at this time, Dr Norwood stated that Ms Moore was repeatedly asking for extra Oxycontin tablets, which he was refusing. He stated that "at the time I thought it was going to be easier to reduce the amount of benzodiazepines and rather harder to reduce her amount of painkillers".

The prescription records indicate that within three days of her 6th overdose, on 9 August 2010, Ms Moore was able to obtain another 40 Diazepam, in bulk. Then, on 5 September 2010, two days after her 7th overdose discharge, she obtained under prescription, another 40 diazepam. Her next admission to hospital was on 11 September 2010, from which she did not recover.

Dr Norwood stated that Ms Moore was reliant on her medications and that they didn't work as well for her over a period of time. When working at his Mary St Clinic, Dr Norwood stated that Ms Moore regularly presented early, looking for additional medication, which he complied with "more that I probably should have". Despite this, he accepted what she told him. He stated that she tended to run out of her medication early, which indicated overuse. He agreed that seeking earlier supply of medication could be classified as drug-seeking behaviour, which might suggest addiction or dependency. He described his overall strategy as trying to reduce her overall dosage rather than trying to find any alternative treatment method.

Of the total 7 overdoses in just over 15 months, from which she was resuscitated, Dr Norwood stated that he had known of definitely four and maybe 5. Of two of those, he accepted that a change in dosage or the inclusion of a new drug, may have been responsible. He stated to the Court that he hadn't comprehended the full risk to Ms Moore, and that if he had been aware of all of her overdoses, he would have tried to cut her dose back. He also stated that he hadn't considered her to be an intravenous drug user, although he conceded that he probably should have.

It is difficult to accept Dr Norwood's explanation at he didn't fully realise the extent of Ms Moore's overuse of her prescribed medication. Objectively, Dr Norwood described regular requests by her for additional medication, which he acceded to. He was repeatedly advised by the Latrobe Regional Hospital of her drug overdoses, including being found in a hospital toilet, while an admitted patient, with intravenous drug paraphernalia. Any mental health component for her overdoses was ruled out by the relevant services, leaving significant dependency issues as the causal factor for her overdoses.

In 2009, Dr Norwood underwent an investigation by the Medical Board and as a result, was subject to a professional services review assessment. That assessment resulted in two educational stipulations, which were implemented over 12 months from 2011 to 2012. The first was to engage an expert in addiction and pain management for some in-depth tuition and the second was to have three-monthly reviews of patients, carried out by one of his colleagues.

Dr Norwood stated to the court that, as a result of the further education and supervision, he had developed a sounder understanding of strategies to manage prescription medication dependence.

The Coroners Court of Victoria has recognized the regularity of deaths where drug toxicity involving oxycodone alone or in combination with other drugs, are occurring. Oxycodone and Diazepam appear particularly often as a prescription combination in these deaths. The Coroners Prevention Unit, upon request of Coroners, has analysed benzodiazepine deaths occurring in Victoria between 2000 and 2014. A total of 1133 overdose deaths were identified during the period, where benzodiazepines were involved. 1109 of those deaths involved the combination of benzodiazepines with other drugs. The CPU analysis revealed the following points:

- The annual frequency and annual rate of benzodiazepine and oxycodone deaths has steadily increased over the time period;
- Deaths from multiple drug toxicity, including oxycodone, comprised the majority of the deaths (68%);

A central theme emerged in fatal overdoses involving benzodiazepines, which reflected the following issues with prescribing practices:

- Benzodiazepines prescribed upon request at first consultation;
- Benzodiazepines prescribed on an ongoing basis for an extended period;
- Benzodiazepines prescribed in high doses without any clinical rationale;
- Co-prescribing of multiple benzodiazepines;
- Private scripts for multiple repeats of benzodiazepines; and
- No attempt to establish who else is prescribing benzodiazepines and/or other relevant drugs (particularly Schedule 8 opioids).

The classification of medications is determined by the Therapeutic Goods Administration which classifies medications and poisons according to the *Standard for the Uniform Scheduling of Medications and Poisons* (the SUSMP), also known as the Poisons Standard. The level of the Schedule determines the level of control over the availability of that medication or poison. Schedule 4 medications can only be accessed under prescription from a medical practitioner and are medications that could potentially be associated with adverse outcomes such as misuse, addiction, toxicity in overdose. Benzodiazepines are Schedule 4 medications. Schedule 8 medications, including oxycodone are "substances which should be available for use but require restriction of manufacture, supply, distribution, possession and use to reduce abuse, misuse and physical or psychological dependence". In Victoria, the restriction applying to Schedule 8 medications, including oxycodone, is that a medical practitioner must have a relevant permit to prescribe that drug for that individual patient, the process for obtaining which is administered by the Victorian Department of Health.

In Ms Moore's case, she had been referred to a pain specialist, Dr Peter Janovic, at the Caulfield Pain Management and Research Centre, for review in 2002 and in 2003. On each occasion, her dose of oxycodone was increased, firstly from 80mg per day to 100mg per day and in 2003, to 120mg per day.

Dr Norwood was the holder of an appropriate permit to dispense oxycodone to Ms Moore at a rate of a maximum of 240mg per day. The permit issued for the period 18 March 2010 to 17 March 2011 included the following notation:

> *"Prior to a further application being considered by the department to treat this patient with Schedule 8 poisons, it is recommended that the patient is reviewed by a consultant in a relevant speciality affirming that this treatment is appropriate for the management of the patient's condition.'*

That review did not take place, as Ms Moore died during the currency of that permit. It appears that no specialist pain management review had taken place since 2003.

A comparison of Dr Norwood's medical records with the PBS records for the dispensing of prescribed medication indicates that there were a number of prescriptions presented to pharmacies for which there is no corresponding entry in Dr Norwood's medical records, even though the prescription is said to have been issued by him. Dr Norwood was unable to provide any confirmation of issuing those prescriptions. It is possible that those prescriptions were not, in fact, issued by Dr Norwood, but on his prescription forms and presented by persons unknown.

Although Ms Moore seems to have predominantly attended Dr Norwood, the presentation of what may have been false prescriptions raises the role of pharmacies in reducing the phenomenon of "doctor shopping" or "pharmacy shopping". Previous coronial recommendations have called for the development and implementation of a computer aided system to manage the issues of patients who "doctor shop" or "pharmacy shop". A Real-Time Prescription Monitoring system is currently being implemented which will assist in preventing such behaviours. I note that the system includes real-time monitoring of all Schedule 8 medicines but also all benzodiazepines. This will be a particularly important initiative in reducing multiple drug overuse and toxicity related deaths.

It is noted that the Royal Australian College of General Practitioners (R.A.C.G.P) has developed Guidelines for "Prescribing Drugs of Dependence in General Practice". Part B to the guide aims to assist general practitioners in appropriate prescribing of benzodiazepines, to discourage inappropriate use and to reduce harm. The aim of the guide is to "facilitate accountable prescribing of benzodiazepines, improve practice systems of care and support patient-focused care". Part C of the Guidelines aims to help general practitioners prescribe opioids appropriately.

Many previous coronial recommendations have called for the Therapeutic Goods Administration to re-schedule all benzodiazepines to be listed as Schedule 8 drugs. Not all are, including Diazepam. I add this finding to those before me.

In Ms Moore's case, her dependence on opiates and benzodiazepines was very significant and, according to Doctor Norwood, he was refusing to prescribe make-up drugs where she was over using. Doctor Norwood stated that he was attempting to reduce her dependency on Diazepam, but that she was possibly accessing replacement drugs elsewhere.

There is little doubt that Ms Moore was dependent upon prescription medication and that attempts by Doctor Norwood to reduce that dependency were not consistent, timely or successful. More could have been done, by her general practitioner, to reassess her pain management regime, with a view to a structured and supervised reduction and possible replacement by other medication. This is particularly so in light of the repeated unintentional overdoses in the 12 months prior to her death and leading to her death.

Although Ms Moore knew that the use of those drugs, at the rate that she was using them, could end her life, she continued to do so. Reviews on multiple occasions by mental health services found no suicidal intention or ideation. Ms Moore did not appear to be open to rehabilitation or reduction in her use of prescribed medication.

I find that Ms Moore died in circumstances where she had ingested a quantity of medication in such a combination that it caused her heart to arrest. Ultimately, she was resuscitated but did not regain consciousness. In my view, she was not intending to kill herself at the time, but overusing her prescribed medication in a way that was very predictable, given her history, and which was, to a large degree, preventable.

I find that Ms Moore died of bronchopneumonia in the context of combined drug toxicity, namely Oxycodone and Diazepam.

Comments

I note that the Victorian Department of Health and Human Services is in the process of implementing a Victorian-based real-time prescription monitoring system to prevent ongoing harms and deaths associated with pharmaceutical drug misuse and inappropriate prescribing and dispensing of pharmaceutical drugs. This important and welcome initiative will assist doctors and pharmacists in identifying and preventing a range of drug-seeking and overuse behaviours.

I note also that the Royal Australian College of General Practitioners has developed Guidelines for "Prescribing Drugs of Dependence in General Practice". These guidelines will be of significant benefit to doctors in identifying and managing drug-seeking behavior, in addition to considering the appropriateness of prescribing benzodiazepines in any given situation. I encourage the College in its ongoing education and support of general practitioners in responsible prescribing practices.

I add my voice to the many coronial recommendations that the Therapeutic Goods Administration re-schedule all benzodiazepines in Schedule 8.

I distribute this finding to the Australian Health Practitioner Regulation Agency for information and so that it may take whatever action it sees fit in light of the facts revealed by this case.

Publication

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

Mr Norman Dawes, next of kin;
The Secretary, Department of Health and Human Services;
Dr Malcolm Dobbin, Senior Medical Advisor, Real-Time Prescription Monitoring Taskforce, Department of Health and Human Services;
Therapeutic Goods Administration;
Royal Australian College of General Practitioners;
Dr Terence Norwood;
Avant Law, Solicitors for Dr Norwood
Australian Health Practitioner Regulation Agency
Detective Peter Johnston, Bass Coast CIU, Victoria Police

Signature:

Date: 11 December 2017