I, Simon Cooper, Coroner, having investigated the death of Heather Patricia Dale McKenzie

Find, pursuant to section 28(1) of the Coroners Act 1995, that

a) The identity of the deceased is Heather Patricia Dale McKenzie;

b) Mrs McKenzie died in the circumstances set out further in this finding;

c) The cause of Mrs McKenzie’s death was mixed alcohol and drug toxicity; and

d) Mrs McKenzie died during the night of 14 and 15 February 2018 on the cruise ship cruise Silver Whisper docked at Burnie, Tasmania.

Introduction

In making the above findings I have had regard to the evidence gained in the comprehensive investigation into Mrs McKenzie’s death. The evidence includes:

- an opinion of the pathologist who conducted the autopsy;
- the results of toxicological analysis of samples taken at autopsy;
- Tasmania Police Report of Death to the Coroner;
- relevant police and witness affidavits;
- medical records and reports; and
- forensic evidence.

Background

Mrs McKenzie was born in Toronto, Canada on 25 May 1950, to William and Sarah Gordon. She grew up in Toronto with her sisters, Barbara and Karen. On 7 July 1972, she married James McKenzie. Mr and Mrs McKenzie have two daughters, Sarah and Kirsty, and two grandchildren. Mrs McKenzie worked as a teacher for much of her adult life and her husband was CEO of the advertising company Leo Burnett.
Relevantly, Mrs McKenzie’s medical history indicates that Mrs McKenzie was a regular and heavy consumer of alcohol. Her medical records indicate that in 2009 she was treated for falling down the stairs due to excessive alcohol consumption. There are several other entries in her medical records concerning excessive alcohol consumption. In her affidavit, Mrs McKenzie’s daughter, Kirsty, confirmed that her mother was an alcoholic and that her consumption of alcohol increased in severity as she aged.

Mrs McKenzie’s medical records also indicate that in August 2014 Mrs McKenzie was diagnosed with hypertension. On 12 December 2016 Mrs McKenzie was prescribed amlodipine (a medication used to treat high blood pressure and coronary artery disease) 5mg to last from December to March 2017 with no refills. Finally, I note Mrs McKenzie’s medical records indicate she also suffered from arthritis.

**Circumstances of Death**

At the time of her death Mrs McKenzie was on a holiday cruise on the ship Silver Whisper with her husband. The couple boarded the ship on 4 February 2018 intending to spend 6 days in Australia. On 14 February 2018 the Silver Whisper docked at Burnie Port. Mrs McKenzie and her husband went to bed at approximately 10.30pm and went to sleep. It is evident that the couple had consumed a considerable amount of alcohol prior to retiring for the evening.

At approximately 1.45am Mr McKenzie woke up and found that his wife was not in bed. He located her lying unconscious next to the bed. Mr McKenzie contacted reception requesting medical assistance. The ship’s doctor and nurse attended and commenced CPR. Four doses of adrenaline were administered, but to no avail. Ambulance Tasmania was contacted and paramedics boarded the ship and treated Mrs McKenzie.

Paramedics also administered a dose of adrenaline but were unable to revive Mrs McKenzie. Use of a defibrillator indicated that Mrs McKenzie’s heart was in a non-shockable rhythm, accordingly precluding defibrillation.

**Investigation**

After all efforts at resuscitation ceased, Mrs McKenzie was declared deceased. Ambulance Tasmania contacted police. Within a short time, police officers attended room 830 of the Silver Whisper where Mrs McKenzie’s body was located. They spoke with all of the parties involved and observed that Mr McKenzie appeared to be intoxicated and was consuming liquor at the time of speaking to police. Due to his level of intoxication and distress following Mrs McKenzie’s death, police were unable to obtain an affidavit from him.
Police conducted an examination of Mrs McKenzie and the cabin. She was located lying perpendicular to the bed, with her head closest to the bed wearing a nightie. There were no apparent injuries, bruising, or softness to the skull. Police observed there was an IV line in Mrs McKenzie’s neck, which had been used by the ship’s doctor to administer adrenaline. There was a small amount of blood located at the rear of the neck but no obvious injury as to the source of that blood. The ship’s doctor told police that he and the ship’s nurse had moved Mrs McKenzie in order to treat her. She was originally located lying parallel to the bed with her head towards the head of the bed.

Police noted the cabin was tidy. There were no apparent signs of a struggle or any disturbance. Officers noted and took possession of a large clip seal bag with a number of tablets in it. Amongst what appeared to be vitamins and supplements were Mrs McKenzie’s prescription medications, Amlodipine 5mg and Apo-Raloxifene 60mg.

Two wine glasses were seen on a small table in the cabin. The glasses smelt strongly of whiskey.

In addition to uniform officers and a crime scene examiner, officers from the state police Criminal Investigation Branch attended the scene and assisted with the examination of Mrs McKenzie’s body and the cabin. Those specialist investigators did not find anything that suggested Mrs McKenzie’s death was suspicious.

After formal identification, Mrs McKenzie’s body was removed from the ship and transported by mortuary ambulance to the mortuary at the Launceston General Hospital.

At the Hospital an autopsy was performed upon Mrs McKenzie’s body by a pathologist. The pathologist found no signs of injury or violence and no obvious pathological cause of death. Samples taken at autopsy were subsequently analysed at the laboratory of Forensic Science Service Tasmania. That analysis indicated that at about the time of her death Mrs McKenzie’s blood contained alcohol (0.337 grams per 100 millilitres of blood), caffeine, and 0.05 mg/L of amlodipine – a level greater than therapeutic.

I note that Mrs McKenzie’s blood alcohol concentration was highly elevated. Blood alcohol concentrations in excess of 0.4 grams per 100 millilitres are potentially fatal and may cause loss of consciousness, respiratory failure and without supportive care, death. Death has been reported in cases at levels as low as 0.2 grams per 100 millilitres in persons with underlying cardio-respiratory disease, and in those who have aspirated vomitus or have obstructed airways.

I also note that amlodipine is a calcium channel blocker and often used (as it was in Mrs McKenzie’s case) in the treatment of hypertension and angina. Therapeutic concentrations of amlodipine have been reported at approximately 0.001 to 0.02 milligrams per litre. On the other hand, symptoms of toxicity related to amlodipine may be evident when concentrations
are greater than 0.07 milligrams per litre.
There is evidence to suggest that there is an interaction between amlodipine and alcohol which may result in either increased amlodipine concentrations or reduced alcohol concentrations. Several studies have shown that the associated use of amlodipine and alcohol may cause an increase of the drug and cause tachycardia, hypotension, and/or postural hypotension.

**Conclusion**

The evidence viewed as a whole satisfies me that the cause of Mrs McKenzie’s death was mixed alcohol and drug toxicity. Her death was due to what might be described as an unfortunate drug interaction with toxic levels of alcohol. I am satisfied on the evidence that there are no suspicious circumstances surrounding Mrs McKenzie’s death. There is no evidence to suggest the involvement of any other person in her death nor that her death was the result of voluntary and intentional acts on her part.

**Comments and Recommendations**

I extend my appreciation to graduate legal trainee Mr Cameron Deavin for his assistance in bringing this investigation to a conclusion.

The circumstances of Mrs McKenzie’s death are not such as to require me to make any comments or recommendations pursuant to Section 28 of the *Coroners Act 1995*.

I convey my sincere condolences to the family and loved ones of Mrs McKenzie.

**Dated** 17 October 2019 at Hobart in the State of Tasmania.

**Simon Cooper**

Coroner