

From death we learn 2014



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All medical and nursing staff involved in the reporting and review of death

The patients and their families

The Patient Safety Surveillance Unit (PSSU) welcomes suggestions on how this publication series may be improved. Please forward your comments to PSSU@health.wa.gov.au.

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From Death We Learn and coronial inquest finding documents identified in this text can be downloaded from: http://ww2.health.wa.gov.au/Articles/A E/Coronial-Liaison-Unit

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State Coroner's Foreword

It is the most fundamental responsibility of any coroner to investigate a reportable death in order to determine the cause and manner of death. A coronial investigation is a fact finding exercise, aimed not at apportioning blame, but at establishing the circumstances attending the manner of death. A coroner may make comments about procedural and systemic improvements that could be made to prevent recurrence. Coronial recommendations provide health services with an opportunity to address risks to patient safety.

A reportable death may be investigated at a public inquest and that investigation may or may not reveal contributing factors that result in recommendations being made in the interests of public health or safety. For deaths investigated without an inquest, the coroner will make Administrative Findings, which are provided to the next of kin but are not made available to the public.

A number of the cases summarised in this booklet were undertaken because the deaths were subject to a mandated coronial inquest. In accordance with the requirements of the Coroners Act 1996 a coroner must hold an inquest if the deceased was, immediately before death, a person held in care (s.22). This includes a person who was an involuntary patient under the Mental Health Act 1996.

The law regarding mandated inquests reflects the community's concern about the supervision, treatment and care of persons whose freedoms have been removed by operation of law. The coroner is required to make comment on that supervision, treatment and care.

For the majority of mandated inquests in this booklet, the supervision, treatment and care was determined to be satisfactory and no recommendations were made. Nevertheless they provide an opportunity for systemwide learning.

I note and commend the ongoing efforts of the health services to improve healthcare delivery by their own inquiries and implementation of corrective actions, and through the detailed biannual reporting to me on actions taken in response to findings and recommendations.

The Patient Safety Surveillance Unit has provided these short clinical summaries to allow health professionals to benefit from the clinical messages and lessons learned. I encourage all health services to utilise these summaries as a means of raising awareness of important messages, which have come from the investigation of the circumstances attending these deaths, so that lessons learned can protect the living.

I would like to acknowledge the families and friends of loved ones whose deaths have been investigated by the coroner. It is with utmost respect to you that I support this publication in the hope that it helps to prevent harm to others in similar circumstances.

Ms Ros Fogliani
STATE CORONER

Editorial

This is the ninth edition of *From Death We Learn*, released by the Coronial Liaison Unit (CLU) within the Patient Safety Surveillance Unit. The aim of this publication has always been to raise awareness of the coronial process and the lessons learned from inquest investigations from the previous year. Of course, the overarching objective is to prevent similar deaths or harm to patients. For the first time, we have included key discussion points for each case to prompt discussion and debate in an educational or professional development setting.

While no recommendations were made by the coroner in the majority of the cases herein, they still provide valuable lessons for health service providers. Again, it is clear that effective communication is critical in the provision of safe health care. This is especially true at transitioning times when the patient is particularly vulnerable, such as admission, discharge and transfer. Despite the deaths in this booklet occurring over two years ago, the key issues are still highly relevant in 2015. Communication is one of the most frequently identified contributing factors for SAC1 clinical incidents, being identified as a factor in 68.8 per cent of SAC 1 investigations. It is second only to patient factors as a contributing factor.¹

With the majority of the cases in this booklet involving the provision of mental health care it is an opportune time to highlight the enactment of the *Mental Health Act 2014* (the Act). To assist clinicians navigate the requirements of the Act, the Chief Psychiatrist has developed the *Clinicians' Practice Guide to the Mental Health Act 2014* ² (the Practice Guide). The purpose of the Practice Guide is to clearly explain what is in the Act, suggest how it should be interpreted and outline practices clinicians should adopt when performing a function under the Act. The Guide maintains that, when wrestling with complex matters, clinicians should act in a patient-centred and recovery-focused way.

As required under the Act, the Chief Psychiatrist has published standards and guidelines. These standards and guidelines are included in the Guide and clinicians are expected to comply with them. Of particular relevance to the cases in this booklet are the standards relating to the transfer of care (standard 7); with the purpose to ensure the continuity, safety and quality of care for consumers and carers is maintained during transfer either between or within services; and, physical health care of mental health consumers (standard 4). The PSSU encourages all health services to promote awareness of these standards, and trusts that the summaries described here provide some contextual material to support further discussion.

The CLU would like to take this opportunity to thank Dr Robert Turnbull, who retired in 2014 as Medical Advisor at the Office of the State Coroner after 10 years. He had a passion for speaking out for patients even after their death and also in educating medical practitioners regarding coronial matters.

Your Safety in Our Hands in Hospital. An integrated approach to patient safety surveillance in WA hospitals, health services and the community: 2015. Available at: http://ww2.health.wa.gov.au/Reports-and-publications/Your-safety-in-our-hands-in-hospital

² Clinicians' Practice Guide to the Mental Health Act 2014. 2015. Available at: http://www.chiefpsychiatrist.health.wa.gov.au/docs/CliniciansPracticeGuide.pdf

Abbreviations

AACC Aboriginal Ambulatory Care Coordination [outreach program]

AHPRA Australian Health Practitioner Regulation Agency

AWOL Absent Without Leave

CAHS Child and Adolescent Health Service

CLU Coronial Liaison Unit

CPAP Continuous Positive Airway Pressure

CPFS Department of Child Protection and Family Services

CRC Coronial Review Committee

CT Computed Tomography

DAMA Discharge Against Medical Advice

ED Emergency Department

EDIS Emergency Department Information System

FIFO Fly-in, Fly-out

ICU Intensive Care Unit

IT Information Technology

NMHS North Metropolitan Health Service

OSC Office of the State Coroner

PMH Princess Margaret Hospital

RPH Royal Perth Hospital

SMHS South Metropolitan Health Service

SNRI Serotonin-Norepinephrine Reuptake Inhibitor

SSRI Selective Serotonin Reuptake Inhibitor

WACHS WA Country Health Service

Introduction to the Coronial Liaison Unit

The Coronial Liaison Unit (CLU) is situated within the Patient Safety Surveillance Unit at the WA Department of Health. The CLU consists of two Senior Clinical Advisors and a Senior Policy Officer. It was established in 2005 as a health initiative to improve communication between WA Health and the Office of the State Coroner. The CLU facilitates the allocation of health-related findings from coronial inquests for implementation in hospitals and health services.

The Coronial Review Committee (CRC) operates in connection with the CLU by providing executive strategic support. It was formed in January 2014 with its main purpose being to improve the governance and decision-making in relation to statewide implementation and response to coronial recommendations. The CRC evaluates coronial recommendations and makes decisions about the level of response required. Members also review stakeholder responses provided for the biannual reports to the State Coroner to assess their completeness.

The CLU, in conjunction with the CRC, reviews all public inquests that have a healthcare aspect to them and places the recommendations via the Chief Medical Officer with the appropriate area within WA Health. Expert advice and comment on the recommendations and actions taken to improve patient safety in response to the inquest findings are fed back to the State Coroner in a biannual report.

For the purpose of quality improvement, the Coroner's Ethics Committee allows the CLU access to post-mortem reports to assist clinicians to undertake mortality reviews. Where clinicians require post-mortem findings to effectively review a death, an application for the preliminary results can be made via the CLU.

The CLU continues to work with the Office of the State Coroner to share lessons learned from mortality review to improve future patient care.

Introduction to inquested cases

Under the *Coroners Act 1996 (WA)* every regional magistrate is contemporaneously a coroner. However, in practice the majority of Western Australian inquests in 2014 were conducted by: the State Coroner Ms Ros Fogliani; Deputy State Coroner Ms Evelyn Vicker; and Coroners Mr Barry King and Ms Sarah Linton.

There were 2,009 deaths reported to the Office of the State Coroner in the 2013/14 financial year. Of these, 683 deaths were dealt with by the treating doctor issuing a death certificate recording a cause of death. The remainder are accepted as coronial cases for further investigation and 77 cases were subject to public inquest.³ Of the 77 inquests, 34 of them were mandated in accordance with the *Coroners Act 1996*.

Public inquests are legal cases conducted in open courtrooms, and the coroner has a similar role to that of a judge of the Supreme Court. The objective of an inquest is to establish the facts surrounding the death of the person in question. It is not to determine any question of liability.

After hearing an inquest, a coroner must find, if possible:

- the identity of the deceased
- how the death occurred
- the cause of death
- the particulars needed to register the death under the *Births, Deaths and Marriages Registration Act 1998 (WA).*

They are then able to make comments and recommendations regarding any matter connected with the death, including the provision of health care or the actions of other public sector agencies.

WA Health notes all coronial recommendations pertaining to health care, and provides regular reports to the Office of the State Coroner outlining the responses to each. These responses have been included in this report where the time-frame has allowed a response to be formulated before publication.

Office of the State Coroner. Annual Report: 2013-2014 (internet). 2014. Government of Western Australia. (cited 2015 August 18). Available from: http://www.coronerscourt.wa.gov.au/ files/Annual Report 2014 2015.pdf

Sharing of information critical

Key messages

- Patients from remote areas of Western Australia face significant barriers to accessing health care, including distance, language and cultural barriers.
- Care should be taken in ensuring discharge plans are understood by patients and their families, especially with those who may not speak English as their first language. Hospital discharge plans should be distributed to more than one healthcare provider – e.g. local hospitals and clinics that may be involved in providing medical care in the future, and also to other agencies involved in providing care.
- Full vaccination is crucial in maintaining health and avoiding preventable infections in patients who do not have a fully functioning spleen.

A five-month-old boy from the Kimberley died from meningitis. His family was supported by the Department for Child Protection and Family Support (CPFS), though he was not subject to a care and protection order.

He had three siblings who were in the care of the CPFS as a result of their early neglect and their mother's itinerant lifestyle, which included alcohol intoxication and domestic violence issues. Initially preparing to take the deceased into care after he was born, the CPFS agreed to the deceased's mother looking after him with their support on transfer back to the Kimberley after his birth in Perth. He and his mother lived in a variety of CPFS-provided houses while planning for safe transition back to her family's community progressed.

When the deceased was nearly four months old he was transferred to Perth with a febrile illness. There he was found to have splenomegaly with multiple splenic lesions of uncertain aetiology and haemolytic anaemia. He remained in hospital for three weeks and was discharged on antibiotics, with a follow-up appointment with a visiting paediatrician made for one month later in a town 100 km from where he was living, to ensure the deceased would receive his four-month vaccinations and to review his splenomegaly. A discharge summary with information about the deceased's condition and the scheduled appointment was sent to that town's hospital, but unfortunately not to any other health clinic or to CPFS.

The day before the appointment was scheduled, the deceased's mother received permission from CPFS for a short trip to her family's community, roughly 200 km away, and she and the deceased remained there for nearly a fortnight; longer than planned.

After they had been at the small remote community for one week, the deceased was seen by a disability support worker who was visiting another resident of the community. He conveyed his concerns that the deceased was unwell to a nurse at the clinic of a nearby town, 30 km away.

The nurse made enquiries with CPFS and the hospital in the town where the deceased and his mother had been staying before this visit. She also attempted to obtain the discharge summary from Perth regarding his recent admission, but was unable to without providing written permission from the deceased's mother, which she could not easily

obtain. With no specific knowledge about the deceased's splenic problems, she had no pressing reason to close the clinic and drive to the small community to review him. She advised the disability support worker to offer the deceased's mother transport to the clinic when next he visited the community.

Four days later the disability support worker returned to the community and offered the deceased's mother a lift to the clinic for herself and her baby. She declined, concerned about how she would make her way back home. The disability support worker rang CPFS, and workers from the Kimberley office 200 km away closed their office and drove to the small community the next morning.

Finding the infant floppy and unresponsive, they took him to the nursing clinic in the nearby town where intraosseous fluids and antibiotics were administered. From there he was taken to Darwin by the Royal Flying Doctor Service. Again, there were difficulties and delays in obtaining the discharge summary from Perth. Blood cultures showed *Streptococcus pneumoniae* infection; MRI of the brain showed areas of infarction; and, CT of the abdomen showed an infarcted spleen. On discussion with specialists in Perth, it was felt the original splenic lesions were most likely areas of infarction due to a congenital abnormality in the ligamentous attachment of the spleen and that he would have been very vulnerable to infection without a fully functioning spleen.

Further treatment was to no avail and he died one week later.

Inquest findings and comments

The coroner found that death was a result of acute meningitis. At post mortem it was discovered the deceased also had splenic torsion that had caused complete infarction of his spleen and so detrimentally affected his immune ability. The coroner found death arose by way of natural causes.

The importance of sharing information between appropriate medical facilities was discussed. The coroner was of the view that medical information critical to the welfare of a child should not be solely dependent upon the consent of a legal guardian.

The coroner also made specific reference to an initiative that she believed would have made the most significant difference in a case like this – the Aboriginal Ambulatory Care Coordination outreach program (AACC). It was implemented as a pilot project from July 2012 and comprises a multidisciplinary team including medical, nursing and administrative staff, as well as a Senior Aboriginal Project Officer and a Senior Aboriginal Social Worker. It targets "out of hospital" follow up care and includes carecoordination, communication with primary care providers, outreach services, discharge planning, community nursing and Telehealth.

Coroner's recommendations

- 1. Continued resourcing of the (Aboriginal Ambulatory Care Coordination) AACC outreach program and its expansion to all regions in Western Australia. That AACC is of critical importance to the provision of a future for Aboriginal children.
- 2. That the Department (for Child Protection and Family Support) trial a practice requiring all mothers subject to the department's pre-birth planning processes to nominate a GP (or appropriate alternative) for the child for follow-up purposes after birth.
- 3. That WACHS ensure the nominated GP receives, understands and is supported for the implementation of follow up information and care.
- 4. That WACHS continue to progress the implementation of clinical information sharing systems to facilitate the sharing of patient information across the Kimberley, such as the Communicare system.
- 5. That the Department (for Child Protection and Family Services) and WACHS work together to clarify the need to provide relevant healthcare information to the department for children not "in care" but with families unlikely to understand the significance of complex medical information and needing assistance with complying with medical recommendations.

WA Health actions

- The Aboriginal Ambulatory Care Coordination outreach program has been continued through the Footprints to Better Health initiative.
- A Neglect Protocol has been released for all community health staff in WACHS, which provides guidance for staff when there are concerns about a child's health and wellbeing.
- The implementation of a Community Health Information System is being explored.
 This system would allow the secure transfer of patient information between hospitals and external health service providers.

Reference

see BC inquest findings⁴

- How can you ensure that patients and their families understand their condition and future treatment plans? What strategies exist to manage barriers and cultural differences?
- How does your health service ensure that discharge summaries are provided to all of the people involved in their ongoing care? Could information technology solutions be used?

⁴ http://www.coronerscourt.wa.gov.au/l/inquest into the death of bc subject to suppression order. aspx?uid=2181-6178-3052-1904

Death subsequent to a fall

Key messages

- Deaths that occur after a fall, even if the fall did not directly contribute to the death, are still reportable deaths to the coroner.
- It is the coroner's decision as to whether this death requires further review.
- Falls management should be in place for every patient at risk.

An 83-year-old woman died in hospital as a result of complications following a hip fracture sustained during a fall at an aged-care facility.

The deceased had lived at home with her husband until three months before her death when she sustained a crush fracture in her lumbar spine and developed severe pain. After this, her condition deteriorated rapidly and she became quite frail.

Home care services began providing assistance with home duties and personal care, however, she continued to suffer with severe back pain. Her cognitive state also deteriorated, and this was attributed to the medications required for pain management.

Due to his own deteriorating health, her husband became unable to care for her at home and she was admitted to an aged-care facility for a period of respite care. On arrival at the facility, the deceased was noted by staff to be confused and disoriented. As she was regarded as being at risk of falling, her bed was lowered to the lowest setting. She had a fall overnight on her first night, a second fall during the afternoon of her second day, and a third during the second evening. After each of these falls nursing staff examined the deceased, but although she complained of pain in her hip and had bruises to her face, they did not call a doctor to review her as they believed she had no significant injuries. Her bed was placed against the wall with bed rail raised to prevent her from falling again.

On the following day, family members visited her and raised concerns about her condition. She was taken by ambulance to hospital, where a fracture in the neck of her femur was found on x-ray. She was admitted to hospital, and after spending several days in traction, had an operation to repair her femur.

The deceased developed pneumonia after the operation. Her condition deteriorated due to her underlying medical problems including severe mitral valve disease, congestive cardiac failure and pulmonary fibrosis. She died nine days after the operation.

Inquest findings and comments

Post mortem examination revealed findings consistent with pneumonia on a background of advanced pulmonary fibrosis and congestive cardiac failure.

The coroner found that death arose by way of accident. While it was felt the cause of death was probably not directly related to the fracture, the fall and subsequent fracture set off a further decline in the deceased's health, which ultimately ended in her death.

It became apparent that there were several aspects of the care administered by the care facility that did not meet the required standard and were not in keeping with the facility's policies. The facility has implemented a number of education sessions and policy

changes surrounding the assessment and management of residents after a fall, as well as improvements in handover processes and incident reporting. These changes have resulted in overall improved level of care provided by the facility.

No recommendations were made as the coroner was satisfied with the improvements undertaken by the aged-care facility before the inquest.

References

- DANIEL inquest findings⁵
- Falls Prevention Health Network⁶

Discussion point

How is the risk of falls reduced at your site, and what should occur after a patient fall?

http://www.coronerscourt.wa.gov.au/l/inquest into the death of nola inez daniel.aspx?uid=4115-4129-3779-2660

⁶ http://www.healthnetworks.health.wa.gov.au/network/fallsprevention.cfm

Medicine and alternative therapies

Key messages

- All health practitioners must ensure that any advice provided to patients/carers is within their area of expertise and scope of practice.
- It is sometimes a challenge for medical practitioners to balance their duty of care to a child (the patient) with a family's right to practise their beliefs.
- Medical practitioners have a role in discussing the impact that any alternative therapies may have on medical management with patients (and their families) in order to allow for a fully-informed decision.

A 10-year-old girl died from complications of advanced metastatic hepatoblastoma while in El Salvador, five months after her initial diagnosis was made in Western Australia.

The deceased had grown up in regional Western Australia with good health until she developed shoulder-tip pain. After investigations and biopsies she was diagnosed with metastatic hepatoblastoma.

The opinion of her treating oncologist and the oncology team was that the deceased required chemotherapy and surgery to treat her cancer and that without such treatment she would die. Her parents were aware of this opinion. However they decided that she should be treated with natural therapies instead.

Their GP advised that the advice given by the oncologist should be followed.

The family consulted their naturopath as they were keen to pursue natural therapies rather than chemotherapy. The naturopath advised that while there were some supportive therapies that could be useful, it was illegal for him to be involved in treating a patient with cancer and that the advice of her doctors should be followed.

The oncologist made many attempts to engage with the family to discuss best treatment options, and allowed a two-week delay in commencing chemotherapy in order to allow the family to trial natural remedies. She also offered the involvement of the Clinical Ethics Service in negotiating optimal treatment for the deceased. The oncologist made it clear that she had a duty of care to the deceased, and that legal avenues would be explored if necessary. When she realised that the deceased's parents had no intention of allowing chemotherapy to commence, she initiated legal action.

In light of the acute need for commencement of chemotherapy, the Minister for Health made an urgent application to the Supreme Court of WA for the purpose of securing orders for proceeding with chemotherapy. A hearing date was set urgently, however before the hearing the family flew to El Salvador having obtained clearance to fly from another GP.

This GP had known of their reasons to leave the country and had provided encouragement to the parents that the tumour was not progressing, based on blood tumour marker levels, CT and ultrasound reports. This was not supported by evidence given by an independent oncologist at the inquest and the coroner did not hold that there was any basis for this encouragement.

On arrival in El Salvador, the family commenced the natural therapies as planned, namely applying red clay to the child's abdominal wall. Three weeks after arrival in the country, they sought medical review and again were advised to commence chemotherapy. After another four weeks the deceased's condition had deteriorated significantly and her parents finally accepted the advice of the local hospital and consented to chemotherapy. The deceased died of sepsis and multiple organ failure three weeks later.

Inquest findings and recommendations

The coroner found the cause of death was septic shock and multiple organ failure as complications of advanced metastatic hepatoblastoma.

The GP who provided the family with misleading and incorrect information regarding the progress of the tumour and treatment with natural therapies was referred to AHPRA.

No recommendations were made.

Reference

see STITT inquest findings⁷

- How would you have approached this discussion with this family? How can the interests of the child and the parents be balanced?
- What options are available to you if a parent discharges a child against medical advice?

http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_tamar_jemima_sabbath_stitt. aspx?uid=2300-7191-2821-2605

High-risk surgical candidate

Key messages

- Patients benefit from having surgery at local sites in terms of waiting times, family support, and financial costs.
- However, care should still be taken that the resources available are suitable for the anticipated complexity of the surgical candidates.

A 57-year-old man died of multi-organ failure following an elective cholecystectomy performed in a regional hospital.

The deceased had an extensive past medical history including hypertension, type-2 diabetes mellitus, cerebrovascular disease, raised cholesterol, gastro-oesophageal reflux disease, obstructive sleep apnoea, chronic obstructive airways disease and obesity. He developed cholecystitis two months before his death, and as he recovered in hospital from this illness, arrangements were made for his gallbladder to be removed when the inflammation had settled and he had fully recovered. He was regarded as being a high-risk patient in light of his medical comorbidities, and being at risk of requiring conversion from laparoscopic to open cholecystectomy due to his obesity.

Following what the surgeon regarded as a relatively uncomplicated operation, which had been converted to an open partial cholecystectomy due to difficulties in identifying surgical landmarks, the deceased was managed initially on the day surgery ward.

He was transferred to the high dependency unit that evening following a phone call to the anaesthetist regarding his ongoing pain, drowsiness and dropping oxygen saturations. He was reviewed later that evening on two occasions by doctors from the emergency department with regard to his hypoxia and increasing tachycardia.

Shortly before midnight a blood gas result showed marked acidosis and hyperkalaemia. The deceased was given frusemide after discussion with the surgical registrar, and not reviewed again in person until the next morning despite poor urine output, increasing tachycardia, worsening hypoxia and falling blood pressure.

On arrival of the general physician that morning, it was clear that he required ICU treatment. Transfer to Perth by RFDS was organised, and he was transferred to the emergency department resuscitation bay where he was intubated and cared for until transferred.

On arrival in ICU in a Perth tertiary hospital he was assessed as being in Type 1 and 2 respiratory failure, acute renal failure, with likely upper gastrointestinal ulceration, and was coagulopathic. His outlook was poor and he died the following morning.

Inquest findings and comments

The coroner reviewed the decision process regarding whether surgery on high-risk patients should be performed in a local centre or in Perth. It was discussed that while patients with anticipated difficulties are transferred to Perth, it would be impractical to transfer all patients with co-morbidities, and it may be difficult to predict with certainty all patients who will deteriorate post operatively.

The coroner discussed weighing up the benefits of early surgery in regional centres, albeit with reduced access to ICU support, versus the risks to the patient of waiting for surgery in Perth, where elective surgery waiting lists are already lengthy, and where patients face the risk of further deterioration and complications while awaiting surgery.

The inquest also heard evidence regarding the subsequent increase in medical staffing and availability at the regional hospital, and the introduction of new observation record charts. These charts assist nurses in charting trends in observations and in requiring management at specific points. A Medical Emergency Response Team process has also been implemented.

It was found that death arose by way of natural causes. The cause of death was multiple organ failure and intra-abdominal haemorrhage following cholecystectomy in a man with ischaemic heart disease.

There were no recommendations.

Reference

see DAVIES inquest findings⁸

- This patient deteriorated overnight: What are the risks of overnight deterioration and how can they be mitigated?
- Given the risks associated with WA's large geographical area, what mitigation strategies are in place in your health service to promote patient access to the right care at the right time?

http://www.coronerscourt.wa.gov.au/l/inquest into the death of brian john davies.aspx?uid=6078-2777-2313-2501

Post-operative complications

Key messages

- Post-operative haemorrhage should be considered when a patient deteriorates, no matter how low-risk the surgery.
- Accurate and comprehensive handover is vital.

A 57-year-old woman died as a result of intra-abdominal haemorrhage following an appendicectomy.

The day before her death the deceased had presented at a regional hospital with mild abdominal pain, vomiting and a cough productive of yellow sputum. She had a prior history of high blood pressure and chronic obstructive pulmonary disease. The cause for her symptoms was not immediately clear, so she was admitted for IV fluids, analgesia and observation. She developed hypotension, hypoxia and a fever and was ultimately diagnosed with acute appendicitis and prepared for urgent surgery the following day. She was also treated with intravenous antibiotics before the operation to cover possible pneumonia.

Her blood pressure was persistently low before the operation, assumed to be due to sepsis, and she required an infusion of metaraminol to maintain an acceptable blood pressure throughout and following her anaesthesia. The surgeon noted the appendix to be gangrenous but not ruptured, and there was no peritonitis or intraoperative bleeding.

The deceased initially appeared to be recovering well and the GP anaesthetist handed over care to the after-hours ED doctor before leaving the hospital. It is unclear how thorough this handover was. The deceased was then admitted to the high dependency unit where nursing handover incorrectly documented that she had had a ruptured appendix.

She deteriorated rapidly after her arrival in the high dependency unit, with worsening hypotension and hypoxia. The after-hours ED doctor was called to review her, and on the information available to him began treating the deceased for septic shock. There was no rostered after-hours specialist cover, and the ED doctor did not seek additional assistance from the treating surgeon. The significance of a severely reduced haemoglobin measurement on a blood gas was missed and a central venous line insertion attempt had failed.

The deceased continued to deteriorate despite increasing vasopressor support and died shortly afterwards with her family at her side.

Inquest findings and comments

Post-mortem examination found two tears in the mesenteric tissues and 1600mls of blood and clot in the abdominal cavity. It was postulated at inquest that mesenteric tears had developed at completion of surgery on release of traction clamps and that bleeding started post-operatively.

It was accepted that significant intra-abdominal haemorrhage is an extremely rare complication of an appendicectomy. As a result there was no suspicion raised that the observations that indicated the deceased was deteriorating may be accounted for by blood loss rather than septic shock. It was felt impossible to predict with certainty whether

appreciation of a correct diagnosis earlier would have provided a different outcome in light of how rapidly the deceased deteriorated and died.

The coroner found that death arose by way of misadventure with the cause of death being intra-abdominal haemorrhage following appendicectomy.

The coroner heard that there had subsequently been multiple changes to staffing, clinical procedures and policies at the regional hospital. The introduction of the adult observation and response chart was also noted.

There were no recommendations for this matter.

Reference

J.GILBERT inquest findings⁹

- What are the common signs of clinical deterioration in the post-operative setting that should be monitored for all patients?
- What is the differential diagnosis on this post-operative patient? Why do you think the low haemoglobin was missed?

http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_julissa_teresa_gilbert.aspx

The absconding patient

Key messages

- Often the most vulnerable patients abscond from hospital.
- Hospitals should have processes in place when a patient absconds.
- All staff should know what to do if a patient absconds.

A 60-year-old man with a background of alcoholic liver disease died of unknown causes after discharging himself from a regional hospital on a cold winter's night. He was found deceased in nearby bushland less than a month later, the time and manner of death being unascertainable.

He had initially been admitted to his local hospital after being assaulted. He had a broken nose and suspected head injuries. When he developed a fever a few days later he was treated with antibiotics and transferred to the regional hospital, several hundred kilometres away. Over the following fortnight he received treatment for fever and alcohol withdrawal. He underwent serial CT scans of his head, initially to assess his injuries from the recent assault, and later to monitor for any evolving haemorrhage as he was found to be confused at times. These scans confirmed a broken nose, but did not show any intracranial bleeding.

During the fortnight when he was a patient at the regional hospital he was not always cooperative with staff or compliant with hospital rules, choosing to smoke cigarettes in bed and in the bathroom. He also left the hospital grounds of his own accord on more than one occasion.

After two weeks of treatment he was ready to be discharged home. A referral to the social worker was made to help arrange his return to his home town with family members. However before this could be arranged, he left the hospital wearing only hospital pyjamas, taking a blanket with him.

His family, the police and the hospital coordinator were informed but efforts to find him were unsuccessful. His body was found weeks later by a local resident.

Inquest findings and comments

The cause of death was unascertainable with the possibilities of complications arising from liver disease, exposure, accident or natural causes all considered options. The coroner declared the time of death to be unascertainable, but most likely to have occurred within a period of days after the deceased left the hospital. The cause of death was found to be unascertainable. The coroner made an open finding as to how the death arose.

The coroner heard evidence that patients absconding from hospital were a common occurrence at this regional hospital.

The coroner made no recommendations but said that it would seem prudent for WACHS to consider a standardised procedure regarding missing patients in a similar manner to the WACHS *Discharge Against Medical Advice Policy.*

WA Health actions

 The WA Country Health Service published the WACHS Missing or Suspected Missing Inpatient Procedure Policy.

References

- BEASLEY inquest findings¹⁰
- WACHS Missing or Suspected Missing Inpatient Procedure¹¹

- How does your health service ensure safe discharge for patients?
- What is the difference between Absent without Leave, Discharged Against Medical Advice and absconding?
- What is your health service's process for responding to a missing patient?

http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_delray_beasley.aspx?uid=8615-3696-0467-1567

https://healthpoint.hdwa.health.wa.gov.au/policies/Policies/WACHS/Missing%20or%20Suspected%20Missing%20Inpatient%20 Procedure.pdf

Suicide of an inpatient

Key messages

- Information from family members and other relevant third parties is often essential for a thorough assessment of patients. Care should be taken to ensure this information is utilised and communicated appropriately.
- There can be a fine line between providing sufficient surveillance of patients at risk of suicide and disrupting sleep but patient safety and integrity of observations is paramount.
- Means of self-harm can be hard to entirely exclude, however, the removal of ligature points and other potentially lethal items is important in providing a safe area for patients at risk of suicide or self-harm.
- Health facilities need a suitable ward environment for mental health patients.
- Transitioning, including admission and discharge periods, is associated with an increased risk of suicide; the provision of timely clinical support is essential.
- Some patients may have a chronic or fluctuant risk of suicide.
- Appropriate psychiatric care may be unable to predict or prevent suicide but suicide prevention must remain a key priority for clinicians and health services.
- Significant events or dates (e.g. Christmas) may represent an increased suicide risk; increased vigilance is required.

Case 1: Communication with carers

A 64-year-old man died in a mental health unit as a result of asphyxia. At the time of his death he was an involuntary patient under the *Mental Health Act 1996*.

He had been receiving psychiatric care for over two decades and had been diagnosed with personality disorder, depression, hypochondriasis and obsessional behaviours. His medical history included recurrent migraines and neck pain, and he was taking amitriptyline and tramadol for this in addition to fluoxetine for depression.

Originally from the United Kingdom, he had moved to Perth with his wife and first of two daughters. His marriage ended in 2002 and his mental health problems appear to have escalated following this. His migraines reportedly worsened and he began to complain of suicidal ideation.

He eventually required an involuntary admission in 2006 and following this his condition was initially good. He did not continue with his psychiatric follow-up however, and he again deteriorated over the ensuing years becoming reclusive, obsessional and complaining of constant pain.

In 2010 he once again began to express suicidal thoughts, and following an overdose of his medications, was reviewed in an emergency department by a psychiatry registrar. He denied ongoing suicidal ideation, stated that the overdose had been impulsive as a response to his chronic pain, and declined voluntary admission. He was discharged back to the care of his GP.

Two days later he attempted to cut his throat with a hacksaw, but it was too blunt to make any significant injury. He then visited his ex-wife's home to ask for a sharp knife. She called an ambulance and he was again taken to hospital where he was admitted involuntarily to the locked ward of the mental health unit. He absconded the next day and police assistance was required to return him.

He was assessed as having a high risk for suicide and 15-minute visual observations were requested during his stay in the psychiatric intensive care unit. There were concerns over his long-term tramadol use and its potential for harmful side-effects. This was ceased while a full medical review could be carried out.

During the second week of his admission, the deceased called his daughters and expressed thoughts of self-harm and suicide. His daughter reported these calls to staff on both occasions, but it appears that the information was not recorded or passed on to his treating team.

On day 10 of his admission the deceased was transferred to the open ward on 15-minute observations. His daughter again reported her concerns about his mental state and recounted the phone calls to the doctors. Despite this information, the decision to transfer him to the open ward was upheld. The deceased's daughter was assured that he had settled, had been reviewed by the psychiatrist and would be closely monitored overnight.

Fifteen-minute observations were continued overnight and documented that he was asleep in bed apart from a period where he had woken complaining of pain and had been given some paracetamol. Morning staff found a collection of towels shaped to look like a person in his bed and discovered that he had committed suicide at some time overnight in the bathroom by covering his head with a plastic bag. Resuscitation was deemed futile by the time he was discovered.

Inquest findings and comments

The decision to transfer the patient to the open ward was discussed at length and the factors affecting this decision were reviewed. It was ultimately felt that the decision was appropriate and that the increase in observation frequency actually reflected an increase in patient security.

The origin of the plastic bag that the deceased used to asphyxiate himself remains unknown. The coroner heard that all plastic bags on the ward have subsequently been replaced with paper bags and that ward policy includes a list of forbidden items.

The performing of 15-minute visual observations was undertaken in keeping with hospital policy at that time. The nurses were required to ascertain the presence of the patient in the room and aimed to minimise sleep disruption while doing so. No negligence was found on behalf of the nurses. Changes in policy outlining that "visual observations" now requires a respiratory rate to be documented were recognised.

The coroner identified that the deceased's daughters concerns were not passed on to his treating team and that the decision to transfer to the open ward was initially made without this information.

The cause of death was found to be asphyxia, with the manner of death suicide.

The coroner found that the relevant supervision, treatment and care provided to the deceased was reasonable in the circumstances.

Coroner's recommendation

 That the Mental Health Unit investigates its procedures of managing communications with the families of patients with a view to ensuring that information is relayed to the relevant health professional.

Action taken:

- The Mental Health Unit has advised that it has established strategies to improve the record keeping of information received from family members and other carers, including adhesive telephone log book labels that can easily be inserted into patient medical records.
- The Chief Psychiatrist has reaffirmed the *Clinical Guideline: Communicating with Carers* and *Families* to all WA Health services and has confirmed that appropriate local policies are in place to address documentation of carer concerns.

Case 2: Vigilance for potential ligature points

A 53-year-old man died in hospital from hanging while an involuntary patient under the *Mental Health Act 1996.*

The deceased had been diagnosed with schizophrenia at age 17. He lived an itinerant lifestyle with intermittent homelessness and low level criminal activities. He was treated with various medications for his psychotic symptoms, which helped control his symptoms initially, but became less effective over time. He required regular and frequent admissions to mental health facilities over the course of his life.

He had spent six months in prison following assault and breach of bail charges. He continued to receive appropriate psychiatric care while in prison, but when concerns were raised about his vulnerability and risk of being assaulted in prison, he was transferred to a maximum-security psychiatric hospital operated by the State Forensic Mental Health Service. Following completion of his prison sentence, he remained in hospital as an involuntary patient due to ongoing delusional symptoms and a lack of insight into his condition.

Over the ensuing 11 months there were very few changes in the deceased's condition. His psychotic symptoms persisted; he was irritable with others and attempted to abscond on multiple occasions. At times he requested to be discharged, but his treating team had great difficulty in finding suitable safe accommodation for him.

The day before his death, the deceased chaired the weekly patient ward meeting, apparently in a happy mood. Nursing staff did not identify anything about his conduct or behaviour that raised their concern.

Just after 3.30am the next morning, another inpatient discovered the deceased hanging by a shower hose in the men's bathroom. He raised the alarm and nursing staff commenced CPR. The ambulance service continued resuscitation efforts, but the deceased was pronounced dead at the nearby tertiary hospital emergency department.

Inquest findings and comments

A post mortem examination identified hanging as the cause of death.

The coroner found that death resulted from suicide. He was satisfied that the patient received appropriate levels of supervision, treatment and care during his last admission.

The coroner noted that following his death, the shower hose in the men's bathroom had been removed, and he suggested that the psychiatric hospital continue to attempt to identify and, if reasonably practicable, remove potential ligature points as an ongoing improvement of the facility.

Case 3: Supervision during transition times

A 32-year-old man died from hanging shortly after admission to hospital as an involuntary patient under the *Mental Health Act 1996*.

The deceased had a history of depression and had previously attempted suicide while in his early twenties. He recovered from this episode with the support of his family. Following some time working in the transport industry in Melbourne, he started working in the mining industry in his late twenties. He was working a fly-in fly-out (FIFO) job in the Pilbara region when a serious relationship he was in broke down in the months before his death. He began drinking heavily and developed significant symptoms of depression.

Following a paracetamol overdose, he was transferred from the Pilbara to Perth for admission in a psychiatric ward. He was admitted as a voluntary patient in an open ward, however, he was placed under close observation with no ward leave allowed after he rang his father from a nearby pub where he was drinking beer.

Several days later he disclosed to staff that he had attempted to hang himself with a belt. His status was changed to involuntary and one-on-one constant observation was commenced. Transfer to a locked ward at another hospital was organised.

On arrival at the locked ward, he was met by nursing staff but the admitting doctor was not immediately available to review him. The nursing staff considered the deceased to be high risk, and kept him in the open area of the ward near the nurse's desk to allow 15-minutely observations to be made. He was given a small dose of diazepam as per a phone order from the doctor, and fed dinner. He completed a written Safety Plan with one of the nurses. His property was searched, and a long strap removed from his duffel bag before being returned to him.

That evening the open area of the ward was quite noisy and full of patients in a high state of emotional arousal. The deceased asked if he could go to his room to lie down. There was no quiet safety room available, and as the 'unusually high unruliness' of the open area was considered to be increasing his distress, the nursing staff allowed the deceased to move to his room, remote from the nurses station. Fifteen-minute observations were continued, and he was seen to be in his room in a calm state over the next hour.

Before his medical review and within the time scheduled for his 15-minute observations, the deceased was found to have hanged himself in his room using the handles of his bag and the top corner of a door-less cupboard. CPR was commenced, but he was unable to be resuscitated.

Inquest findings and comments

While the coroner found that the quality of supervision, treatment and care of the deceased by staff at the psychiatric hospital was reasonable in the circumstances, one of those circumstances was the unsuitability of this ward for the purpose for which it was being used.

The coroner did not make any recommendations, but encouraged those who decide the nature and the level of resources that are allocated to the provision of mental health services in Western Australia to give this area of public health the priority it requires.

Case 4: Significant events can be challenging

A 28-year-old woman died from multiple injuries sustained from falling or jumping from a freeway overpass. She was an involuntary patient under the *Mental Health Act 1996* on leave for Christmas.

The deceased had a history of mental health disorders, which had commenced with a drug-induced episode about 10 years before her death when she was in Year 12. She had completed most of a university degree before ceasing her studies and finding part-time work.

She spent seven months in South Korea working as an English teacher, but returned home when her mental state again deteriorated. She required hospitalisation and was diagnosed with bipolar affective disorder with psychotic features. She was commenced on medication and received ongoing outpatient psychiatric care. She eventually managed to return to work and regained her social life.

In the two months leading up to her death the deceased became non-compliant with her medications and once again developed psychotic symptoms and suicidal ideation. She was admitted to hospital as an involuntary patient. Her medications were recommenced and her mental state slowly but progressively improved over the ensuing three weeks. She was allowed increasing amounts of leave with her family and appeared to respond well to this.

She spent Christmas with her family but the following night she left home in secret and either fell or jumped from a pedestrian bridge over the freeway. She sustained non-survivable injuries.

Inquest findings and comments

The cause of death was found to be from multiple injuries and manner of death was by suicide.

The coroner found that the quality of treatment and care received by the deceased from the medical and nursing staff at the psychiatric hospital was reasonable and appropriate. The deceased's mother gave a statement in support of this.

The coroner did not make any recommendations.

References

- CHURCH inquest findings¹²
- HUNT inquest findings¹³
- PRISGROVE inquest findings¹⁴
- RUTHERFORD inquest findings¹⁵
- Clinical Guideline: Communicating with Carers and Families¹⁶
- State-wide Standardised Clinical Documentation (SSCD) for Mental Health Services¹⁷
- Review of the admission or referral to and the discharge and transfer practices of public mental health facilities/services in Western Australia (the Stokes Review)¹⁸

- You receive a phone call from a patient's husband disclosing information about plans to self-harm. What are your responsibilities in relation to documenting this information and actioning it?
- How does your health service ensure that information from patients' families is shared with all members of the treating team?
- How would you evaluate and reduce the risk of a patient's self-harm at your site?
 What clinical assessment tools could be used?
- Does your health service provide a safe environment for patients who may be at risk of self-harm or suicide?
- What particular characteristics of the FIFO lifestyle can affect mental health and relationships?

¹² http://www.coronerscourt.wa.gov.au/l/inquest into the death of lynn desmond ernest church. aspx?uid=6623-3205-2878-2620

http://www.coronerscourt.wa.gov.au/l/inquest into the death of gregory laurence hunt. aspx?uid=2108-9650-9902-4238

¹⁴ http://www.coronerscourt.wa.gov.au/l/inquest into the death of aaron luke prisgrove.aspx

http://www.coronerscourt.wa.gov.au/l/inquest into the death of sarah jane rutherford. aspx?uid=5451-3399-4987-4064

¹⁶ http://www.chiefpsychiatrist.health.wa.gov.au/docs/Communicating with Carers and Families.pdf

¹⁷ http://www.health.wa.gov.au/circularsnew/circular.cfm?Circ_ID=13105

¹⁸ http://www.mentalhealth.wa.gov.au/Libraries/pdf_docs/Mental_Health_Review_Report_by_Professor_Bryant_Stokes_AM_1.sflb.ashx

Absconding and suicide of a mental health patient

Key messages

- These cases involve the death of an involuntary patient and therefore are mandated inquests
- In transitioning from hospital to community there is a balance between the restrictions and freedom
- Appropriate psychiatric care may not be able to predict or prevent suicide

Case 1: Absconding following grounds access

The patient died aged 28 years after he hanged himself after absconding from a psychiatric hospital. He was, at that time, an involuntary patient under the *Mental Health Act 1996*.

He had a history of drug and alcohol misuse dating back to 14 years of age. His mental health issues first arose in five years before his death and appear to have been precipitated by drug use and withdrawal. He required a number of admissions at various mental health facilities over the following five years with drug-related psychotic incidents. He developed violent tendencies and on several occasions assaulted people and damaged property.

He was involuntarily admitted to a psychiatric hospital after a violent outburst at his mother's house. His provisional diagnosis was psychotic disorder possibly secondary to substance abuse, and a personality disorder. He attempted to abscond five days later but was found at a nearby train station and returned to the hospital. After this his mother obtained a Violence Restraining Order against him as she feared for her safety.

Although occasionally demanding and aggressive, his mental state settled and over the course of the next two to three weeks arrangements were made for him to return to his Homeswest unit. He was keen for this to occur, but due to a pending court appearance and the risks he posed to his mother, he remained an involuntary patient with gradual increases in unescorted grounds access.

On 29 November 2010 he absconded from the hospital during a period of unescorted grounds access. He was immediately declared AWOL, a search of the hospital grounds was conducted and the police were notified.

When he left the hospital, he went to a friend's house where he stayed the night. He was found hanging by an electrical cord in the house the following afternoon when his friend returned from work.

Inquest findings

Post-mortem exam confirmed death by hanging and the coroner found the manner of death was suicide.

The coroner found that the care and treatment he received at the psychiatric hospital was reasonable and appropriate. No recommendations were made.

Case 2: Balancing safety with autonomy

A 28-year-old man died by hanging after absconding from a mental health ward. He was an involuntary patient under the *Mental Health Act 1996*.

The deceased had a history of mental health issues dating back to his late teens when he had threatened suicide after the breakdown of a relationship. He subsequently became withdrawn and began using illicit drugs and committing crimes.

After being convicted of a number of crimes he was diagnosed with a drug-induced schizophreniform psychosis and was admitted to the forensic unit of a psychiatric hospital. He returned to that unit multiple times over the next few years until his condition eventually stabilised on clozapine. While in the community, he was frequently on a Community Treatment Order to ensure his ongoing treatment with medication.

His last admission to hospital was as an involuntary patient, following a period of non-compliance with medications. Throughout his admission he was regarded as low-risk for self-harm, but at increased risk for absconding, aggression and substance abuse. His condition began to improve after three weeks of regular medications and he was transferred to an open ward.

Unfortunately his condition rapidly deteriorated over the next few days and he required transfer back to the secure unit for another week. His condition once again stabilised and the deceased was transferred back to an open ward. He was cooperative and several times indicated to staff that he was keen to go home with the support of his family. He was, however, noted to be missing in the late afternoon one day. Searches of the ward and hospital grounds were conducted, to no avail. When he did not return by the 10.00pm lockup time, police were notified and a missing person's alert was issued.

The deceased had gone to his uncle's house where he stayed the night. He appeared in good spirits and although his uncle was aware that he had absconded from the hospital, he saw no indication that the deceased intended to harm himself.

The deceased hanged himself at his uncle's house the next day and was discovered when his uncle returned home from work.

Inquest findings and comments

The cause of death was found to be ligature compression of the neck and the manner of death was by suicide.

A no-smoking policy had been introduced at the hospital in 2008 and was in place during the deceased's last admission. While nicotine replacement therapy was offered, the deceased, among many other patients, were frustrated at this deprivation of the freedom to smoke. A subsequent operational directive dated January 2013 allows an exemption for adult involuntary mental health patients, allowing them to smoke outdoors in designated areas provided that alternatives to smoking are provided and considered.

Coroner's recommendations

The coroner was satisfied that the quality of the supervision, treatment and care of the deceased was appropriate. No recommendations were made.

References:

- FORKIN inquest findings¹⁹
- SCOTT inquest findings ²⁰
- Smoke Free WA Health System Policy 21

- How do you assess suicide risk? What tools or assessments do you use? How validated are these methods?
- Is there a balance to be found between the Health Department's no smoking policy and the rights of autonomous adults to smoke?
- How does your health care service support and encourage patients to quit smoking?
- How is risk discussed with and communicated to family and friends?

¹⁹ http://www.coronerscourt.wa.gov.au/l/inquest into the death of luke isaac forkin.aspx?uid=0377-4491-1919-6569

http://www.coronerscourt.wa.gov.au/l/inquest into the death of robert kenneth scott. aspx?uid=0299-5403-4626-2006

²¹ http://www.health.wa.gov.au/circularsnew/circular.cfm?Circ ID=12926

Physical health in mental health patients

Key messages

- Chronic mental health problems are often associated with poor physical health due to physical side effects of treatments, lifestyle choices, and financial and other stressors. The life expectancy for patients with chronic mental health conditions may be reduced by as much as 15-20 years.
- Coexisting physical and mental health problems may make either or both more challenging to treat.
- Good quality long-term accommodation options for people in WA who have both mental illness and organic brain injury remain limited. Quality of life should be considered for long term mental health patients.
- Acute health issues may coexist or mimic mental health presentations.
- A wide range of medications can cause hyponatraemia. Patients at increased risk include women and the elderly.
- All health services should provide rigorous physical health assessment and medical care for patients with mental health conditions.

Case 1: Multiple comorbidities and medication side-effects

A 50-year-old man died from complications of pandemic influenza on a background of chronic obstructive pulmonary disease. He was an involuntary patient under the *Mental Health Act* residing at a psychiatric hospital at the time of his death.

The deceased had a history of chronic paranoid schizophrenia that was precipitated by drug use in his late twenties. He had required multiple admissions to a psychiatric hospital over the years, often for long periods of time and usually due to exacerbations of psychotic symptoms. He had been on a variety of medications which had slowly become less effective over time, and was an involuntary patient in a psychiatric hospital for the last nine months of his life.

He also smoked heavily and suffered from chronic obstructive pulmonary disease. He was morbidly obese and had sleep apnoea. He had required multiple admissions at a nearby tertiary hospital for respiratory illnesses. He had refused to decrease his smoking and would not use a CPAP machine to treat his sleep apnoea.

His psychotic symptoms had become intractable and ultimately a decision was made to trial clozapine. His increased risk of side-effects was recognised, but after undertaking further investigations including seeking second opinions, the deceased was commenced on clozapine following consultation with his family.

Four days after commencing treatment with clozapine the deceased developed a fever and was reviewed by the duty doctor. The doctor was aware of the potential for developing agranulocytosis with clozapine, and the resultant increased vulnerability to infection, and wished to transfer the deceased to a tertiary hospital for further management, but the patient refused to go.

Instead, the duty doctor requested blood tests and four-hourly observations and withheld the next morning's clozapine dose. Hourly visual checks were carried out overnight but the deceased was uncooperative and refused to allow nurses to check his vital signs.

At 4.30am another patient alerted the nursing staff to the deceased having difficulty breathing. Ten minutes later he suffered a respiratory arrest. He was unable to be resuscitated despite good resuscitation efforts at both the psychiatric hospital and the nearby tertiary hospital where he was transferred.

Inquest findings and comments

Post-mortem examination showed bronchitis in the lungs and fatty change to the liver. Microbiological testing of lung tissue showed the presence of H1N1 Influenza A virus, also known as swine flu virus.

The coroner found that the death was due to natural causes and was satisfied that the quality of all facets of the care and treatment of the deceased was reasonable and appropriate.

No recommendations were made.

Case 2: Quality of life for long-term residents

A 51 year old man died from congestive cardiac failure while an involuntary patient under the *Mental Health Act 1996*.

The deceased had a mild degree of intellectual impairment, and a long history of mental health issues dating back to his teenage years. He had a tendency towards aggression and violence and had been imprisoned for two years after he set his mother's house on fire. He required multiple admissions to a psychiatric hospital over the years and was diagnosed with chronic paranoid schizophrenia with treatment-resistant psychotic symptoms. Due to his mental health and intellectual impairment, his affairs were administered by the Public Trustee from when he was in his thirties.

He was a heavy smoker with Type 2 diabetes, chronic obstructive pulmonary disease, recurrent pulmonary embolisms, ischaemic heart disease and congestive cardiac failure. He was often noncompliant with his medications. He developed polydipsia, which exacerbated his heart failure and caused low sodium levels.

In the four years before his death he was a resident of the long-stay ward at a psychiatric hospital, and although he was initially difficult to manage, he settled over time. Attempts to transition him to a supported community environment failed due to his complex medical problems, aggressive behaviour and ongoing chronic psychotic symptoms.

In the months leading up to his death his congestive cardiac failure worsened and was treated with diuretics.

On the day of his death he was found lying on the floor unresponsive by another patient who alerted staff. Cardio-pulmonary resuscitation was commenced immediately and resuscitation efforts continued by paramedic staff and staff at a nearby tertiary hospital, but were unsuccessful.

Inquest findings and comments

Post mortem examination revealed features of significant congestive cardiac failure and ischaemic heart disease.

The coroner found that the death was due to natural causes.

The coroner was satisfied that the treatment and care of the deceased with respect to his psychiatric and medical conditions was reasonable and appropriate. However, the coroner noted the deceased's inability to easily access his own funds. He had accumulated substantial savings by the time of his death, which might have been used to improve his quality of life and alleviate boredom, a major complaint for patients in psychiatric hospitals.

Coroner's recommendations

The coroner recommended that case managers of long-term mental health inpatients
whose finances are controlled by the Public Trustee's Office consult with the Public
Trustee with a view to implementing a process of exchange of information in order to
use funds held on behalf of the patients to improve the patients' quality of life.

WA Health actions

- The primary site for long-stay patients in WA has developed a clear process for communication with the Public Trustee's Office in order to improve patients' quality of life.
- The Chief Psychiatrist requested that, where applicable, all sites establish a process to facilitate the sharing of information between the case manager and the Public Trustee.

Case 3: Long-term care following brain injury

A 47-year-old woman with an acquired brain injury died of bronchopneumonia while an involuntary patient under the *Mental Health Act 1996*.

She had a long mental health history dating back to age 14 when she was diagnosed with an "adolescent crisis". She developed ongoing psychotic symptoms and was first admitted to a psychiatric hospital at age 18. She required multiple admissions, in addition to regular outpatient psychiatry input, to manage her symptoms. She was treated with a number of medications including lithium.

She developed hypoxic brain damage after an attempted suicide by hanging aged 23. This left her unable to care for herself due to a significant cognitive impairment. Several attempts to place her in suitable accommodation failed due to behavioural and psychiatric problems and eventually she was admitted into the long-stay unit at a psychiatric hospital.

Her behaviours remained problematic and difficult to manage; she regularly aggravated other patients and often provoked them to the point where she was subject to assault. At times she was found in sexually compromising situations with male patients.

As a result, further efforts were made by many staff members over the years to find a safer and more appropriate environment for her. While these attempts were unsuccessful, funding was eventually secured to provide one-to-one nursing for the last years of her life, and the violence suffered by the deceased was alleviated.

She also suffered multiple medical conditions. She was unsteady on her feet and fell several times. She developed kidney disease, high blood pressure, and diabetes insipidus, possibly due to treatment with lithium, which was ceased.

Her renal function progressively deteriorated and aged 45 a decision was made not to proceed to dialysis as she was not likely to cooperate with the procedures required. Over the course of the next two years her general health declined and she became frail and unsteady, often suffering from nausea, anorexia and vomiting.

Two days before her death she was noted to have a low blood pressure and was unsteady on her feet. The next day, her BP remained low, her pulse was also noted to be low and she required an antiemetic for vomiting.

At about 6.00am on the day of her death the deceased was recorded as having a chesty cough and had vomited a little. At about 8.00am she was found collapsed and unresponsive in her room. Resuscitation was attempted without success.

Inquest findings and comments

The coroner found that death resulted from natural causes, with the cause of death being bronchopneumonia in a context of ischaemic heart disease, chronic renal failure and past hypoxic brain injury.

The coroner was satisfied that the treatment and care with respect to her mental illness, her mental disability and her chronic renal failure was appropriate in the circumstances. It was felt that the psychiatric hospital, as the only institution able or willing to care for the deceased, made the best of difficult circumstances. The coroner heard that the situation for young people suffering mental illness and organic brain damage has improved somewhat since the deceased was first admitted to hospital.

No recommendations were made.

Case 4: Death of long-stay resident with unknown cause

A 49-year-old man died while an involuntary patient under the *Mental Health Act 1996*. The cause of his death was not able to be ascertained.

The deceased was born into a remote Aboriginal community and was raised in a traditional Aboriginal manner. He first started displaying mental health problems after he suffered a head injury at age 16. He also had a history of alcohol and other substance abuse including glue and petrol sniffing when he was younger.

He was first admitted to a psychiatric hospital at age 35 when he was diagnosed with chronic schizophrenia, organic brain syndrome and alcohol and drug abuse. His symptoms were unintelligible speech, inappropriate giggling and deteriorated episodes with aggressive behaviour and sexual inappropriateness. He required repeated admissions over the ensuing five years before he was eventually admitted to the long stay ward.

Over the next six years various accommodation options were trialled, but all were unsuccessful due to the deceased's behaviours. He had no family to support him and his home community was not willing to have him back as he would act inappropriately socially, and become frustrated and abusive at times. Ultimately he returned to hospital as an involuntary patient for long term care, with social support from the Aboriginal Psychiatric Service that regularly took him out for excursions.

Close supervision and management as an involuntary patient was required to protect others from his aggression and sexually inappropriate behaviour, and to protect him from his drug and alcohol abuse.

Over time he developed mild chronic obstructive pulmonary disease, as well as a tendency to have excessive intake of fluids leading to low sodium levels.

He was treated with a variety of antipsychotic medications over the years, but without much success. One month before his death, he was commenced on clozapine. The usual strict monitoring regime was followed and other than some constipation, he did not appear to develop any side effects of the medication.

On the day of his death, he had not reported any concerns and had appeared to be his usual self. When he did not return to his room in the evening a search was conducted and he was found slumped, and unresponsive in a chair outside the ward. CPR was commenced, but was unsuccessful and it became clear that he had been dead for some time.

Inquest findings and comments

Post mortem examination did not reveal a cause of death and it was recorded as unascertainable. Of note there were no features of side-effects or toxicity from clozapine. The coroner found that death resulted from natural causes.

The coroner was satisfied that the deceased was provided with an acceptable level of supervision, treatment and care.

While no recommendations were made, the coroner commented on the inadequacy of facilities at the psychiatric hospital, particularly the long-stay/rehabilitation unit. This had been described as being not at all home-like, with problems of over-crowding and lack of privacy.

It was noted, however, that there was no evidence that these inadequacies had any negative effects on the patient's treatment and care.

Case 5: Medication side-effects

A 62-year-old woman died in hospital while an involuntary patient under the *Mental Health Act 1996*, most likely from a seizure resulting from hyponatraemia.

She was diagnosed with schizophrenia in her early thirties and since then had required ongoing psychiatric care and intermittent admissions. Before her death she was being managed in the community on oral risperidone and escitalopram. Fortnightly depot injections of risperidone were also administered to improve her compliance with medication.

Her medical comorbidities included asthma and hypertension. She had previously had an episode of hyponatraemia, which resolved when her GP altered her blood pressure medications.

A few days before her death family members and her usual community mental health team were concerned about a relapse of her illness and her refusal to accept her depot medication, so she was admitted to the psychiatric ward directly. At the time of admission to the mental health unit the deceased did not have any physical complaints and she refused to cooperate with a physical examination or blood tests. The admitting team decided to delay this assessment until she had settled in and was more cooperative.

On the first full day of her admission she was noted to be drinking excessive amounts of water, and had vomited several times. That evening she became unsteady on her feet, vomited further and was incontinent. The ward doctor recommended an antiemetic and to contact a medical doctor should the symptoms persist; however the deceased subsequently went to sleep and appeared settled. Aware of her tendency to become agitated, the nurses decided to allow her to rest rather than disturb her to administer the injection.

Routine hourly checks noted her to be settled in bed until about 1.00am when nurses found her collapsed and unresponsive. Full resuscitation was commenced but was unsuccessful.

Blood test taken during the resuscitation attempt later identified a critically low sodium level of 114mmol/L.

Inquest findings

On all the evidence the coroner found the deceased most likely died as a result of a seizure triggered by hyponatremia, possibly contributed to by her SSRI medication (escitalopram) in conjunction with her water intake and vomiting. Post mortem examination also revealed evidence of aspiration of vomitus.

Death was found to have arisen by natural causes.

Coroner recommendations

For patients treated with SSRI medication, especially those outlined in the literature
as being more susceptible to hyponatraemia (that is, female, more elderly, and
with other comorbidities which may affect their kidney function), there be an elevated
awareness of the need to monitor for hyponatraemia.

WA Health actions

 The Chief Psychiatrist has formally requested that all staff within the mental health network are reminded of the risk of hyponatraemia with SSRIs, SNRIs and all psychotropic medications. Longer term strategies are being considered by the WA Psychotropic Drugs Committee.

References

- COLLINS inquest findings ²²
- FOSKI inquest findings ²³
- GILBERT inquest findings ²⁴
- GORDON inquest findings ²⁵
- HANSON inquest findings ²⁶
- Clinician's Practice Guide to the Mental Health Act 2014 27

- What are the barriers to providing health care to a physically unwell mental health patient?
- What barriers may exist to providing care to Aboriginal patients with mental illness? How is mental illness perceived in Aboriginal communities, and what initiatives do you know that are aimed at improving Aboriginal mental health? What are your ideas?
- How can your health service optimise the quality of life for long-stay patients?
- An obese patient with a history of smoking is admitted to your ward with severe depression; what strategies can you use to optimise their health?
- Group discussion: Discuss instances in your experience that involved complex patient experiences and how they were managed.

http://www.coronerscourt.wa.gov.au/l/inquest into the death of kevin maxwell collins. aspx?uid=4537-2806-3419-1397

²³ http://www.coronerscourt.wa.gov.au/l/inquest into the death of tom foski.aspx?uid=3746-2417-4271-2641

http://www.coronerscourt.wa.gov.au/l/inquest into the death of amanda alison gilbert. aspx?uid=8785-5998-0095-2701

http://www.coronerscourt.wa.gov.au/l/inquest into the death of ritchie gordon.aspx?uid=4135-0182-2831-7213

http://www.coronerscourt.wa.gov.au/l/inquest into the death of gillian hanson.aspx?uid=2772-5134-5806-1259

²⁷ http://www.chiefpsychiatrist.health.wa.gov.au/docs/CliniciansPracticeGuide.pdf

Medication errors and side-effects

Key messages

- Medication safety requires input from both pharmacists and doctors.
- Special care needs to be taken with medication prescribed infrequently or with potentially toxic side-effects.

Case 1: Prescription error

A 66-year-old man from Indonesia died of multiple organ failure four months after being prescribed an incorrect dose of methotrexate while visiting family in regional Western Australia.

The deceased had a background of arthritis, which he treated with medication that he obtained at a local market place in his home in Indonesia. While visiting family in Australia, he ran out of his usual medication and visited a GP for further treatment.

The GP prescribed methotrexate for the deceased, along with nonsteroidal antiinflammatory medications and a corticosteroid injection. No blood tests to check renal function or blood cell count were performed, and the prescribed dose was written as daily rather than weekly.

The pharmacist filling the prescription informed the patient that the dosing schedule prescribed was unusual, but it is unclear if the GP was contacted to confirm the dose.

A couple of days after commencing the daily methotrexate dose, the deceased became ill with vomiting, diarrhoea and mouth ulcers. After one week he was admitted to the local hospital where he was found to have a very low white blood cell count, old pulmonary tuberculosis and a staghorn calculus. He was diagnosed with methotrexate poisoning. He was transferred to Perth the next day and was admitted to ICU with sepsis, pancytopaenia, coagulopathy, renal and liver impairment and a small bowel obstruction. He had a stormy course in hospital over the next few months, requiring ICU treatment and multiple surgical and endoscopic procedures. He suffered ongoing sepsis, gastrointestinal bleeding and a reactivation of tuberculosis.

During his admission he was reviewed by a rheumatologist and diagnosed with tophaceous gout.

He died in ICU four months after commencing methotrexate.

Inquest findings and recommendations

The cause of death was multiple organ failure. An open finding into the manner of death was made as the coroner did not consider that he was able to find to a sufficient level of satisfaction that the methotrexate prescription caused the death.

The coroner considered that the quality of medical care provided initially to the deceased was well below the standard reasonably expected in Australia, and referred the matter to the Australian Health Practitioner Regulation Agency (AHPRA) under section 50 of the *Coroners Act* 1996.

The coroner did not make any recommendations in this matter.

References

- LAHENGKING inquest findings²⁸
- Medication Safety (Safety and Quality)²⁹

Discussion points

- What are the most common medication errors in hospital with an adverse patient outcome?
- What checks and balances protect patients from medication errors?

Case 2: Transfer, handover and medication error

Key messages

- QT prolongation is a potential side-effect from haloperidol and droperidol.
- Always double check your medications, especially if you have not personally prepared them, or if it is an unfamiliar medication or dose.
- Patient transfer involves the risk of handover errors and miscommunications.
 The reporting of cumulative recent medication doses during handover is important.

A 19-year-old woman from the Kimberley region died as an inpatient of a Perth psychiatric ward from combined drug effect and myocarditis. She was, at that time, an involuntary patient under the *Mental Health Act 1996*.

She was initially seen in hospital in her home town in the Kimberley region over the course of two days following two attempts to hang herself while intoxicated and distressed. She declined voluntary admission to the local mental health unit; so, due to her ongoing high risk of harm to herself, a decision was made to transfer her to Perth under the *Mental Health Act*. The deceased became enraged on being informed of this decision and required restraint and intravenous sedation.

While awaiting RFDS retrieval the deceased was given medications including 52.5mg haloperidol and 30mg midazolam. She was monitored closely however and did not appear to suffer any adverse effects from these medications at the time.

The RFDS staff requested that local staff prepare syringes of haloperidol and midazolam for the flight. This was given as a verbal order, and due to a misunderstanding among the nursing staff, a syringe of haloperidol was drawn up at a concentration of 5mg/ml instead of the expected concentration of 1mg/ml.

During the flight the deceased became aggressive and required further sedation. She was given two 5ml doses of haloperidol before the increased concentration of drug in the syringe was noticed. The RFDS doctor called Perth and attempted to have her transfer

²⁸ http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_daniel_lahengking.aspx?uid=0578-4407-4200-4647

²⁹ http://ww2.health.wa.gov.au/Health-for/Health-professionals/Safety-and-quality

directed to an emergency department rather than directly to a psychiatric ward, however the concerns he relayed were regarding potential sedation rather than the overdose and he was unsuccessful in his attempts to alter her destination.

She was transferred from the airport to hospital by a paramedic team and the information regarding the doses given was lost in the multiple verbal handovers that occurred. On admission to the psychiatric ward, it was assumed that the documented doses of 25mg were miswritten, and must have been 2.5mg doses.

The following day she was unable to be roused from sleep, and so 15 minutely visual monitoring was continued through the day. She was roused briefly to change her clothes in the late morning. Respiratory rates were documented and it appears that in the afternoon the numbers were simply copied from previous entries rather than being observed each time. At 5.00pm, the shift coordinator attempted to rouse the deceased, but found her cold, stiff and unresponsive. Resuscitation efforts were unsuccessful.

Inquest findings and comments

Post-mortem examination revealed widespread myocarditis, and it was commented that there was nothing in her prior history that would have alerted any staff to this possibility. Toxicological input suggested she most likely suffered a fatal cardiac arrhythmia secondary to the excessive haloperidol dosage, which is associated with prolonged QT syndrome.

The coroner found death occurred by way of misadventure and commented that the deceased's management was beset with a series of errors and failures that resulted in her being provided with an overall sub-standard level of care. It was however recognised that several changes have been made to training and procedures that should preclude another death occurring in similar circumstances

No recommendations were made in light of the changes undertaken by the health services involved prior to the inquest.

References

- WILLIAMS inquest findings³⁰
- James Reason's Human error: Models and management (Swiss cheese model)³¹

- What is the handover process for the transfer of a patient? What tools can you use? What are the pros and cons of different formats?
- What procedures are in place with regard to prescription, preparation, administration and recording of medication; and, how do these processes prevent errors from occurring? Specifically, what processes are in place for verbal orders and checking medications?
- The Swiss cheese model has often been used to describe the circumstances surrounding adverse events, where multiple layers of safeguards have failed to allow the incident to occur (the holes align). How many 'holes' can you see in this case and what type of error is each one?

http://www.coronerscourt.wa.gov.au/l/inquest into the death of antoinette williams.aspx

³¹ http://www.bmj.com/content/bmj/320/7237/768.full.pdf

Case 3: Opiate overdose

Key messages

 Maintaining good professional boundaries is a crucial part of providing best possible medical care for our patients. Without them, judgement can be clouded and poor choices made.

A 55-year-old woman with a complex medical history died from multiple drug toxicity in her own home after ingesting a large quantity of oral morphine mixture.

The deceased had a complex medical history including problems with multiple abdominal operations and recurrent bowel obstructions, renal impairment, angina and knee pain.

Chronic pain was a major problem for the deceased, with her stating that she was never pain-free despite multiple analgesic medications. Her pain and analgesia regime was managed jointly by a pain specialist at a public hospital and by her GP. Among her prescribed medications were fentanyl patches and 80mg/day of morphine mixture.

She had a long history of mental illness following alleged abuse as a child, and her first suicide attempt was at age 16. She believed herself to have Dissociative Identity Disorder, formerly known as Multiple Personality Disorder, a controversial diagnosis not widely accepted by psychiatrists. Her first GP and a treating psychiatrist instead diagnosed her as having depression and post-traumatic stress disorder, which led the deceased to believe that she would not find assistance with Perth's mainstream public mental health services. Instead she relied upon another GP, who shared her opinion that she suffered from Dissociative Identity Disorder.

The deceased's GP reported that she also acted in the capacity as friend, carer, and spiritual counsellor to the deceased. The deceased was in daily contact with the GP through a combination of clinic visits, home visits and daily telephone calls. The GP was aware that the deceased had recurrent suicidal thoughts and multiple deliberate morphine overdoses. She had always recovered from these overdoses without medical intervention. No referral to psychiatric services was made partly due to the GP's belief that there were no psychiatrists in Perth who had good outcomes treating patients with Dissociative Identity Disorder.

On the morning of her death the deceased deliberately ingested an overdose of oral morphine elixir, before contacting a friend to advise what she had done. Her friend contacted the deceased's GP who performed a home visit later that morning. The friend stated that the deceased had expressed a wish to those close to her that she not to be sent to hospital if she attempted suicide, as she did not want to be put into the public mental health system. She had requested that her GP be called rather than an ambulance.

Despite noting her to be heavily sedated with slow respirations, and estimating that she had ingested about 800mg of oral morphine, the GP elected to leave the deceased at home, expecting her to spontaneously recover from her ingestion as she had done in the past.

The deceased's husband arrived home from work in the early afternoon and the GP left the deceased in his care. The deceased was unresponsive and asleep at this time. The extent of her overdose was not conveyed to her husband and he was advised just to make sure she was breathing.

The deceased's husband reported that she remained heavily sedated and asleep that evening, but that when he woke at 12.30am the following morning, she was cold to touch and not breathing. An ambulance was called and attended promptly, but she was declared dead at the scene.

Inquest findings and recommendations

Post mortem toxicology studies revealed fatal levels of codeine and morphine in the deceased's blood suggesting that the deceased had ingested an overdose of codeine as well as morphine. Other drugs were found at therapeutic levels.

The cause of death was determined to be multiple drug toxicity. The coroner was unable to determine whether the death arose from suicide or an accident.

No recommendations were made.

Reference:

MINETT inquest findings³²

Discussion points:

• How can you respect patient's wishes and maintain good medical or nursing practice? Can you think of any examples in your own experience?

³² http://www.coronerscourt.wa.gov.au/l/inquest into the death of helen barbara minett. aspx?uid=2094-1600-2541-7463



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