

CITATION: *Inquest into the death of Gabby Gulumunu Wanambi*
[2017] NTLC 010

TITLE OF COURT: Coroners Court

JURISDICTION: Darwin

FILE NO(s): D0090/2014

DELIVERED ON: 7 April 2017

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HEARING DATE(s): 16 & 17 February 2017

FINDING OF: Judge Greg Cavanagh

CATCHWORDS: **Twisted ankle, developed sepsis, not recognised by emergency department in hospital, no attendance by on-call doctor, second death at hospital due to undiagnosed sepsis**

REPRESENTATION:

Counsel Assisting: Kelvin Currie

Counsel for
Department of Health: Peggy Dwyer

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IN THE CORONERS COURT
AT DARWIN IN THE NORTHERN
TERRITORY OF AUSTRALIA

No. D0090/2014

In the matter of an Inquest into the death of

GABBY GULUMUNU WANAMBI

ON 24 MAY 2014

AT GOVE DISTRICT HOSPITAL

FINDINGS

Judge Greg Cavanagh

Introduction

1. Gabby Gulumunu Wanambi (the deceased) was born on 10 December 2002 in the Royal Darwin Hospital to Robyn Yunupingi and Bobby Wanambi from Yirrkala. She was raised in Yirrkala.
2. She had five older siblings and was known to be a healthy child with a lot of friends. She was 11 years and five months of age at the date of her death on 24 May 2014.
3. The family consented to her being called “Gabby” throughout the inquest as it was her “white” name.
4. On Tuesday, 20 May 2014 Gabby was playing with friends on the oval after dark. She said she was running and twisted her left ankle.
5. The following morning, 21 May 2014, she was still in pain and was taken by her grandparents to Yirrkala Health Clinic. She could weight bear but her ankle was tender to the touch. She was seen by Doctor Julian Charles.
6. She appeared generally, to be in good health. The only issue appeared to be significant tenderness around her left lateral malleolus extending onto the dorsal surface of her ankle and some minor localised swelling. There was no heat, redness, bruising or skin change.

7. Pain increased with passive inversion of the ankle but the joint was mobile. The doctor considered the possibility of rheumatic fever but Gabby had no skin changes, rash or unusual movements. Gabby said she felt well and had no shortness of breath. Her heart and lungs sounded normal and she had no fever.
8. A compression bandage was applied and she was sent to Gove District Hospital (GDH) for an x-ray. There was no fracture or other observable injury found on x-ray.
9. The next day, 22 May 2014, Gabby could not weight bear and was in a lot of pain. Her mother took her back to the Yirrkala Clinic. She was once more seen by Doctor Charles. On questioning, Gabby's symptoms were essentially the same as the day before in that she had pain over the lateral and dorsal surface of her left ankle but otherwise felt well. There were no signs of inflammation and her temperature was normal at 37.3 degrees. Her heart rate was 80 beats per minute and her respiratory rate was 20 per minute.
10. The doctor considered that there may have been an occult fracture that would be more apparent in a week and made plans for another x-ray. She was given Panadol, a compression bandage and crutches.
11. Doctor Charles gave evidence at the inquest. I found him to be a most impressive witness. He told me that he had reflected a great deal on his care and treatment of Gabby and as a now had a "raised index of suspicion".
12. On Friday, 23 May 2014 the pain worsened and by night Gabby was getting no relief from analgesics. She was breathing very rapidly. Her mother and father were very worried. Rather than take her back to the Yirrkala Health Clinic they drove her to Gove District Hospital.
13. They arrived at about 10.20pm. Registered Nurse Heynes helped Gabby into a wheel chair and she was taken to the emergency department. Gabby was

unwilling to allow her ankle to be examined and so at 10.30pm she was administered Panadeine and Nurofen and given time for them to take effect.

14. At 11.00pm RN Heynes examined Gabby and found she had a heart rate of 150 and a respiratory rate of 56. Her temperature was 37.8 degrees. Her foot was swollen and warm to the touch. She had pain up to the mid-calf. The nurse knew Gabby had an infection that required further investigation and treatment.
15. RN Heynes phoned the on-call District Medical Officer (DMO), Doctor Geoffrey Harper at about 11.15pm. She said she called with the expectation that Doctor Harper would come and see Gabby.
16. She told the doctor she had an 11 year old girl who had rolled her ankle a few days prior, was unable to weight bear and the joint was swollen and warm. No fracture was seen on x-ray. She told him Gabby had a fever of 37.8 degrees, a heart rate of 150 and a respiratory rate of 56. She was concerned that the ankle pathology might be the source of the fever.
17. When the nurse called, Doctor Harper was at his home asleep in bed. He had been rostered on at the Gove District Hospital that day for anaesthetics between 8.00am and 4.00pm. At 4.30pm he had a handover and was the on-call DMO and anaesthetics cover until 8.00am the following morning for the East Arnhem Region, Groote Eylandt and Gove District Hospital. At the time there was no policy or procedure that required him to see patients presenting at the Emergency Department when he was on call.
18. The Gove District Hospital Emergency Department was not staffed by doctors after 4.00pm. After that time those presenting to the Emergency Department were treated much the same way they would be if presenting to a Health Clinic: they were treated by the nurse using the Central Australian Rural Practitioners Association Standard Treatment Manual (CARPA

Manual) or by the nurse with the assistance of a phone call to the DMO or by the on call doctor if he or she came into the hospital.

19. The call from Registered Nurse Heynes was the first call Doctor Harper had received that evening. It woke him. He did not get out of bed or turn on the light. After speaking to the nurse he was of the opinion that Gabby was suffering from pain, fever and potentially mild dehydration. He did not consider it necessary for him to attend the Emergency Department to assess Gabby. He told the nurse to treat Gabby with 25mg per kilo of Augmentin syrup twice a day and have her return for review the following day.
20. In evidence before me, Doctor Harper said he should have gone into the Hospital. He said that even on just the heart rate and respiratory rate he should have gone in to examine Gabby. He apologised to her family.
21. The nurse administered the first 9 millilitre dose of Augmentin Duo Forte and 200mg of Nurofen and gave Gabby's father a second dose of the medication to take home. The nurse told him to give her the dose in the morning and come back to the hospital. She applied a compression bandage and after an attempt at using crutches she obtained a wheelchair to transport Gabby back to her parent's vehicle.
22. In the morning Gabby was in a lot of pain. Her father gave her the medication. At 12.55pm Gabby was brought back to the Emergency Department by her parents. Her heart rate was 205 beats per minute, her respiratory rate was 62. Her blood pressure was 121/62 and her temperature 36 degrees. Her peripheries were cool and a saturation tracing could not be obtained. She had a distended abdomen and swelling to her lower legs.
23. The radiographer performed an abdominal ultrasound and portable chest x-ray. Those showed a full bladder and bilateral pneumonia. An indwelling catheter was inserted to drain the bladder. An ECG recorded her heartrate at

203. The doctor thought there might be some heart failure and rang the paediatrician at Royal Darwin Hospital.

24. Gabby vomited and she was placed on her side. A nasogastric tube was inserted. She was fitted with an oxygen mask and at 1.53pm a referral was sent to Careflight for her evacuation to Royal Darwin Hospital.
25. The paediatrician from RDH recommended that she be treated for sepsis with high dose Ceftriaxone and with fluid boluses with 10% dextrose. It was decided she would be treated with a broader spectrum antibiotic, Meropenem to cover possible melioidosis and Vancomycin to cover Methicillin Resistant Staphylococcus Aureus. She was administered the Meropenem at 2.00pm. However due to her rapid decline she was not administered the Vancomycin. Gabby was showing signs of respiratory exhaustion. She was drowsy and had a decreased Glasgow Coma Score. She was intubated.
26. Her heart rate declined quickly shortly after intubation. Once it reached 100 beats per minute she was given Atropine. It continued to decline and she was given more Atropine. It declined to 63 beats a minute before her pulse was lost at 2.25pm. Resuscitation of Gabby commenced and continued for the next four and a half hours.
27. She was given adrenaline and chest compressions commenced. After two minutes her cardiac output returned. Loss of output occurred on a further five occasions prior to the Careflight doctors' arrival at 4.38pm.
28. Shortly after, Gabby lost output once more. She was resuscitated and output returned, however she continued to deteriorate despite maximum therapy, constant adrenaline infusion and blood transfusion. She was suffering severe acidosis. Her PH was less than 6.8 (usual 7.4). At no time was she stable enough to transfer to Royal Darwin Hospital.

29. After another loss of output, multi-organ failure became overwhelming. The final cardiac arrest occurred just after 7.00pm. Despite cardiac compressions output was not re-established. She died at 7.08pm.
30. Doctor Terence Sinton conducted an autopsy. He found that she died of Acute Staphylococcal Septicaemia due to suppurative arthritis (infection) of the left ankle.

Issues

31. Death due to septicaemia was once far more common and perhaps due to that there was a greater suspicion when presenting with symptoms such as these. However, with the prevalence of antibiotics it is now not so common. Indeed, I am told that doctors in the big cities may never see such a case.
32. It is unfortunately more common in the Northern Territory. In August 2013, I conducted an inquest into the death of Sara Hampel. On 6 October 2011 Ms Hampel gave birth to a daughter at Gove District Hospital. A week later she fell while in the shower at home hitting her right knee. A day after the fall she was taken to Gove District Hospital by ambulance at about 6.00am with considerable pain in her right knee.
33. Ms Hampel had a high heart rate and high respiratory rate but no fever. It was thought she may have DVT. That was ruled out by 9.30am with an ultrasound. Blood tests indicated a low and deteriorating white blood cell count. However sepsis was not recognised until it was far too late. She did not have the benefit of the administration of antibiotics at a time that may have changed the outcome.
34. It was conceded by the Department of Health that the sepsis recognition criteria were inadequate at the time. They were rectified and training given in relation to recognition of sepsis. I published my findings on 20 November 2013.

35. It was just 6 months later that Gabby was brought into the Emergency Department of that same hospital. She was recognised to have an infection of unknown origin but suspected to relate to the swollen ankle. She had a high heart rate, a high respiratory rate and a mild fever.
36. It was her third presentation in three days for the same issue. Her parents were so worried they had driven her to the Emergency Department late at night.
37. She was suffering from sepsis. It should have been recognised. The death of Ms Hampel should still have been fresh in their memories. The revised recognition criteria and training was still relatively recent. However, it was not recognised. Gabby was seen by a nurse that had been at the hospital only a few months. She was not seen by a doctor. Further testing, such as blood analysis was not undertaken. She was not admitted for observation. She was given analgesics and antibiotics and sent home. When she returned 13 hours later it was too late to save her life.
38. Her death was tragic. The more so because it was so preventable.
39. Dr Harper should have got out of bed and gone into the Hospital to see Gabby. He readily conceded that. In such situations the propensity to blame comes easily. However, far more important are the systems that allowed such a poor decision to be made.
40. Dr Marco Briceno, the Director of Medical Services at Gove District Hospital told me the difficulties of recruiting and retaining a medical workforce had left the personnel under significant pressure. He said they had at that time, nine positions for doctors but generally operated with seven.
41. That had led to the need to operate the Emergency Department at night on the same model as a remote clinic. The on call DMO was also on call for the Hospital (both the wards and the Emergency Department) and there was no

requirement that the DMO see patients who attended at the Emergency Department. Dr Harper had been at the Hospital the whole of the day. It is perhaps unsurprising that woken from a deep sleep his decision making was not at its best.

42. In the month following Gabby's death the Top End Health Service conducted a Critical Incident Review. The reviewers were of the opinion that the treatment of Gabby in the Remote Clinic was appropriate as was her care and treatment at the Gove District Hospital on the day of her death.
43. However, the reviewers had significant concerns about her care and treatment on the evening of 23 May 2014. They were of the opinion that there were issues with staffing, guidelines, systems and infrastructure and made a number of recommendations. They recommended that all children 16 years and under and all other patients triaged as category 1, 2 and 3 must be physically reviewed by a doctor.
44. That recommendation was accepted and soon after it was changed to require all patients attending at the Emergency Department to be seen by a doctor.
45. The reviewers also recommended a further two reviews be undertaken. One of those reviews was of the Gove District Hospital Emergency Department Services. That review was led by Doctor Didier Palmer, the Director of Emergency Medicine at Royal Darwin Hospital. Dr Palmer has provided expert evidence in Coronial Inquests in the past. I have always found his evidence to be impressive. He said in evidence:

“It wasn't about putting a protocol in place because we'd done that and it hadn't worked. It was about a whole series of things that needed to occur.”¹

46. As to the culture at that time, Dr Palmer stated in his report:

¹ Transcript p.56

“The culture is one of assuming least injury/illness rather than actively excluding the greatest illness/injury – this is particularly dangerous in a high morbidity cross cultural environment ...”²

47. Dr Palmer also gave evidence of the need for a culture of continuous improvement:

“Quality is a constantly growing thing that's contributed to by everyone and it's not just guidelines. Guidelines are a basis.

For example, our sepsis guideline in my emergency department, we changed it three times in the last 11 months because we find tweaks because everyone's involved in it and it's a constantly growing thing. It's that bit which was missing and fundamentally that was due to a lack of resourcing. People were running around chasing their tails.”

48. He went on to say:

“I think from where it was to where it is now it is – and I've done reviews of many small hospitals – the changes that I've seen in this one has been the most remarkable I have ever seen ... It is in many respects ten times the hospital now than it was then. That doesn't mean that there's any point in the future that you rest on your laurels. This hospital has to constantly improve its systems. It is an ongoing process. But I've been very pleased. And that's down to Lisa, Marco, Marie Claire and other leaders within the place and also the followers within the place as well.”

49. As to continuous improvement into the future Dr Palmer spoke of “streaming”:

“What we're looking to create is a contribution from the expert resource which is in Royal Darwin Hospital in many specialities ... at the moment say in emergency medicine we provide a staff specialist emergency physician to go out once a month for a week. But that's an unfunded event.

What we want to create is a system of governance whereby someone say in my position for emergency medicine would be responsible for the clinical governance in Katherine, Gove, Palmerston ... you still have the local leadership but you are a single person who's

² Report 2.10.15

responsible for developing the governance so that this does not decay into the future. And that is the concept around streaming.

So that we can make sure that all that sustainability occurs and the constant growth occurs. We're looking at that as a model. It's a model that's widely used in other states and territories and we're looking at developing that in the Top End Health Service. And that's something which definitely I see as the way of protecting these improvements and improving upon them in the future in all the smaller hospitals.”

50. I am told that streamed model supports training for non-specialist medical and nursing staff in the emergency management of patients, advice and training through observation in clinical practice and trauma team emergency care. It also provides for a vital opportunity for education, mentoring, running simulations and workshops, looking at systems and participating in local mortality and morbidity meetings.
51. There is no doubt that the changes brought about due to the death of Gabby have been extensive and have left the Hospital in a much improved state.
52. The doctors in Gove District Hospital no longer undertake the DMO role for the region. That is now operated out of Darwin and the Gove District Hospital received an additional five doctors.
53. Dr Briceno told me of the many changes that have occurred at the hospital. He said they included:
 - a. Every patient is guaranteed to be reviewed by a doctor and seen within the appropriate triage time;
 - b. All doctors have increased training in emergency medicine and in particular to think like an emergency physician and assume the worst case scenario and work back from there by ruling it out;
 - c. The Hospital now has a dedicated triage nurse;

- d. They now have dedicated emergency tools for the early recognition of sick and critically ill patients;
- e. They work with the Emergency Department at Royal Darwin Hospital trying to create a network and to create a stream of emergency services across the Top End.
- f. They have monthly visits by emergency consultants that will spend a week in the hospital working alongside the staff in the Emergency Department providing training in emergency services, assisting in looking at systems and reviewing what's been put in place.
- g. They have instituted morbidity and mortality meetings that allow review of misses and near misses and complex cases. That leads to putting systems in place to prevent small errors from happening again and hopefully bigger ones in the future.

54. Dr Briceno said:

“It’s a work in progress, it’s an ongoing process that we have committed to, to ensure that we’re constantly revising what we do and trying to improve it every day.”³

- 55. I found Dr Briceno to be a most impressive witness and have no doubt that the Hospital has made very great efforts to improve.
- 56. I also had the opportunity to see how the staff from the hospital interacted with the family of Gabby. There was a warmth that was unmistakable and quite remarkable.
- 57. It is tragic that the systems were so poor that Gabby did not receive appropriate care when her parents took her to the Hospital late on the evening of 23 May 2014. It is even more tragic because her death was not

³ Transcript p.47

the first such death. I was assured after the death of Ms Hampel that the issues had been rectified. They clearly were not.

58. However, the effort put in by the Department of Health and the Top End Health Service has been one of the most encompassing responses that I have seen as a Coroner and I commend them on righting the wrongs and putting in place a much improved Hospital.
59. I note the efforts of Dr Palmer, Dr Briceno and the Top End Health Service to establish “streamed” models of care across their hospitals and I commend them on that.
60. At the end of the inquest I invited Counsel for the Department of Health to liaise with my Counsel Assisting to refine the wording of a potential recommendation in relation to the “streamed” model of care and the funding for it.
61. On 22 March 2017 my Office received further written submissions from the Chief Operating Officer of the Top End Health Service dated 22 March 2017 which among other matters stated:

“In summary, this submission highlights the urgent need for an Emergency Medicine Stream across the Top End Health Service – a central standards setting authority that is responsible for ensuring risk management and quality care in every Emergency Department. We anticipate that there will always have to be adjustments made to ensure that protocols and procedures are well suited for the local conditions, but at present there is no effective way to ensure standards are maintained in the long term, particularly when there are changes or weaknesses in local leadership. There must be a way for external monitoring and support to ensure that standards are set, and continually met. Such a stream cannot be established without the commitment of additional funding from the NT Government”.

62. The submission goes on to state:

“Smaller band-aid measures are significant, but they will not effectively minimize risk or morbidity and mortality and there is an

urgent need for the NT Government to support an Emergency Medicine Stream across the Top End Health Service.”

63. The emergency medicine stream is clearly a matter that deserves some priority.
64. Pursuant to section 34 of the Coroner’s Act, I find as follows:
- (i) The identity of the deceased was Gabby Gulumunu Wanambi born on 10 December 2002 in the Royal Darwin Hospital.
 - (ii) The time of death was 7.08pm on 24 May 2014. The place of death was the Emergency Department of the Gove District Hospital in the Northern Territory.
 - (iii) The particulars required to register the death:
 - 1. The deceased was Gabby Gulumunu Wanambi.
 - 2. The deceased was of Aboriginal descent.
 - 3. The deceased was not employed at the time of her death.
 - 4. The death was reported to the coroner by the Gove District Hospital.
 - 5. The cause of death was confirmed at autopsy by Forensic Pathologist, Dr Terence Sinton.
 - 6. The deceased’s mother was Robyn Yunupingi and her father was Bobby Wanambi.
 - (iv) The cause of death was Acute Staphylococcal Septicaemia due to suppurative arthritis of the left ankle.

Recommendations

65. I **recommend** that the Top End Health Service Board give consideration to implementing the Emergency Medicine Stream for all hospitals.
66. I **recommend** the System Manager (as defined by the *Health Services Act 2014*) give consideration to a sustainable model for the emergency medicine stream.

Dated this 7th day of April 2017

GREG CAVANAGH
TERRITORY CORONER