Easter Term
[2022] UKPC 15
Privy Council Appeal No 0105 of 2018

JUDGMENT

Dr Kong Sheik Achong Low (Appellant) *v* Brian Lezama (Administrator of the Estate of Karen Lezama, Deceased) (Respondent) (Trinidad and Tobago)

From the Court of Appeal of the Republic of Trinidad and Tobago

before

Lord Hodge
Lord Kitchin
Lord Leggatt
Lord Burrows
Dame Nicola Davies

JUDGMENT GIVEN ON
9 May 2022

Heard on 25 and 26 January 2022

Appellant
Ian L Benjamin SC
Pierre Rudder
(Instructed by Charles Russell Speechlys LLP (London))

Respondent
Theresa Hadad
Patricia Dindyal
(Instructed by Nera Narine (Trinidad))

DAME NICOLA DAVIES:

1. This is an appeal from the Court of the Appeal of the Republic of Trinidad and Tobago which determined that the death on 6 April 2003 of Mrs Karen Lezama was due to the negligence of the appellant, a specialist obstetrician and gynaecologist. On 26 July 2012 Rahim J gave judgment for the respondent on the issue of liability and directed damages to be assessed by a master. On 27 March 2018 the Court of Appeal (N Bereaux, R Narine and M Mohammed JJA) dismissed the appeal. The court found that the trial judge had made material errors but determined that his conclusions were correct and that the appellant's treatment of the deceased fell below the standard of care enunciated in *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582 ("*Bolam*") and was the cause of her death. On 15 October 2018 the Court of Appeal granted the appellant final leave to appeal to the Judicial Committee.

2. The appellant is a specialist obstetrician and gynaecologist in private practice in Trinidad. He also had privileges at Stanley's Clinic Ltd, a maternity centre.

3. Mrs Karen Lezama was born on 10 April 1965 and was employed as a data entry operator. She was married to the respondent and was the mother of their three children.

4. At the core of the appeal is the contention made on behalf of the appellant that the Court of Appeal failed to analyse properly the evidence of fact and expert opinion and, in so doing, erred in finding that, in treating Mrs Lezama immediately following the stillbirth of her child, the appellant did not diagnose that she was suffering from amniotic fluid embolism ("AFE") which led to post-partum haemorrhage ("PPH") and to disseminated intra-vascular coagulopathy ("DIC") and her death. It further erred in finding that the more likely cause of Mrs Lezama's death was PPH caused by uterine atony which led to DIC and her death. We disagree. We are satisfied that the court carefully analysed the facts and the evidence of the experts and properly concluded on the evidence that the appellant was negligent in his treatment of Mrs Lezama when she suffered a PPH caused by uterine atony which led to DIC and which was the likely cause of her death.

The facts

5. Mrs Lezama was a gestational diabetic who in April 2003 was under the care of Dr Weithers at Stanley's Clinic. An ultrasound performed in early April showed a macrosomic foetus at 36.5 weeks. On 6 April Mrs Lezama was readmitted to Stanley's Clinic and was treated by the appellant as Dr Weithers was abroad. The appellant examined Mrs Lezama and informed her that her baby would be stillborn. At approximately 4:53pm the appellant delivered of Mrs Lezama a stillborn macerated male foetus. The respondent and Dr Manning-Alleyne, a paediatrician, were present at the delivery.

6. Immediately upon delivery significant bleeding ensued. Mrs Lezama's blood was initially thick and red, it became pale pink and watery as the bleeding continued. The appellant directed the nurse to massage Mrs Lezama's fundus. At around 5:00pm 20 units of Syntocinon were administered, its purpose being to stop the bleeding. Fifteen minutes later, a further 20 units of Syntocinon were added. At 5.15pm Mrs Lezama was given one litre of Ringer's lactate (a volume expander) and one unit of Haemaccel (a colloid). Mrs Lezama's blood pressure was dropping. At 5.15pm it was recorded at 46/25 and she was observed to be in shock. At 5.45pm her blood pressure was recorded at 114/54.

7. Dr Manning-Alleyne collected additional Syntocinon from the Port of Spain General Hospital. At 6:30pm one litre of Ringer's lactate and 20 units of Syntocinon were given. At 6:40pm a second unit of Haemaccel was commenced. Mrs Lezama's blood pressure dropped to 35/22. Blood was taken from Mrs Lezama for cross-matching. At 7:00pm Mrs Lezama's blood pressure was recorded at 60/30.

8. At a time between 7.00-7.30pm the appellant asked Dr Manning-Alleyne and Mrs Lezama's brother to go to St Clair Medical Hospital to collect two units of blood. At around 7:30pm Dr Manning-Alleyne called Dr Harold Chang, an anaesthetist, requesting his assistance in the treatment of Mrs Lezama. Between 7.30-7.36pm CPR (cardiopulmonary resuscitation) was commenced but Mrs Lezama was not responding. The appellant then administered the first unit of blood obtained from St Clair. At around 7.50pm Dr Chang attended the delivery room. He observed that one of the two IV drips was not working and that Mrs Lezama was comatose and had suffered a cardiac arrest. He carried out the ABCs of resuscitation with the available facilities. At about 8.25pm a defibrillator was applied to Mrs Lezama. At 8:30pm the second unit of blood was administered.

9. Mrs Lezama's condition continued to deteriorate leading to another cardiac arrest and her death at 10.10pm.

10. On her death certificate the appellant identified DIC as the primary cause of death and PPH as the secondary cause of death.

The action and pleadings

11. On 1 September 2009 the respondent filed proceedings against Dr Weithers (which were later discontinued by consent) and the appellant.

12. The allegations of negligence as against the appellant were contained in para 10 of the Statement of Claim, which pleaded, inter alia, that:

> "The defendants who treated and attended to the deceased at all material times and who knew or ought reasonably to have known that the deceased was a 'gestational diabetic' and/or a 'known bleeder', were guilty of negligence and failed to use reasonable care, skill and diligence in or about the said treatment, attendance and advice which they gave to the deceased and as a result of which she suffered much pain and distress and ultimately died.
>
> **PARTICULARS OF NEGLIGENCE**
>
> (1) Failed to heed that the deceased was a 'known bleeder' and to request, consult or to have due and/or any regard for the medical record of the deceased;
>
> (2) Failed to do or to have done any blood investigations;
>
> (3) Failed to have any or any sufficient quantity of blood on hand in the event of any need for such blood and particularly so in the instant care as the deceased was a 'known bleeder';

(4) Failed to administer any or any sufficient medication to stop the bleeding;

(5) Failed to take urgent and immediate or any reasonable steps to stop the haemorrhage once it had started;

(6) Generally, failed to exercise all due care and diligence in the treatment of the deceased in all circumstances of the case."

13. In his Defence, the appellant accepted that Mrs Lezama was a gestational diabetic but denied that she was a "known bleeder". He denied that he was negligent and/or that he failed to use reasonable skill, care or diligence in his treatment of Mrs Lezama. The appellant averred that Mrs Lezama suffered AFE and, despite his treatment to stop her haemorrhaging, which was at all times in accordance with the practice accepted and recognised as proper by the body of medical practitioners skilled in the field of gynaecology and/or obstetrics, she died as a result of AFE. It was averred that the appellant was able to and did obtain the necessary amounts of blood required by Mrs Lezama. Causation was denied.

14. At the trial before Rahim J, three expert witnesses in the field of obstetrics and gynaecology gave evidence: Dr Singh-Bhola on behalf of the respondent; Dr Jibodh on behalf of the appellant and Dr Persad who provided a report for Dr Weithers but was called by the appellant. Professor Daisley, a pathologist, also gave evidence for the respondent.

The judgment of Rahim J

15. Rahim J made the following findings:

(i) the cause of Mrs Lezama's death was PPH; the judge made no determination as to the possible cause of PPH;

(ii) there was no causal link between Mrs Lezama's status as a gestational diabetic and the risk of haemorrhaging post-delivery;

(iii) Mrs Lezama was not a "known bleeder";

(iv) the appellant was neither unreasonable nor negligent in not having blood on hand in anticipation of Mrs Lezama's delivery;

(v) the appellant ought to have taken on board the representation of Dr Manning-Alleyne that the deceased suffered from PPH and acted consistently with the accepted practice in those cases and as a result, the appellant ought to have requested blood at an earlier stage than he did;

(vi) the appellant was negligent in failing to take urgent or reasonable steps to stop the haemorrhage once it started;

(vii) the appellant was negligent in failing to administer sufficient medication (Syntocinon) to stop the bleeding;

(viii) the appellant ought to have enlisted assistance earlier than when Dr Chang was called;

(ix) the appellant was negligent by failing to ensure better intravenous access and thus, failed to exercise due care and diligence in the treatment of Mrs Lezama;

(x) it was more likely than not that the omission to administer more blood and blood products in a timely fashion resulted in the death of the deceased from PPH.

The judgment of the Court of Appeal

16. On 27 March 2018 the Court of Appeal unanimously dismissed the appeal and found that the appellant's treatment of Mrs Lezama fell below the *Bolam* standard and was the cause of her death. In his judgment Bereaux JA found that the trial judge had made errors of fact in:

(i) failing to decide whether the appellant did diagnose AFE and whether such a diagnosis was reasonable thereby failing to consider a major part of the appellant's case;

(ii) holding that Dr Manning-Alleyne's statement that the deceased was a "known bleeder" should have caused the appellant to act upon it; and

(iii) concluding that the appellant had administered insufficient dosages of Syntocinon which conclusion was not supported by the evidence.

17. Bereaux JA found that the trial judge had come to correct conclusions on the three heads of negligence, namely:

(i) the appellant failed to take urgent and immediate steps to stop the haemorrhage once it started;

(ii) the appellant failed to administer sufficient medication to stop the bleeding; and

(iii) the appellant failed to exercise all due care and diligence in the treatment of Mrs Lezama in all the circumstances of the case.

18. Bereaux JA also held that the trial judge was correct to find that para 10 of the Statement of Claim could not be read in isolation but in the context of the Statement of Claim as a whole: the Particulars of Negligence at para 10(4), (5) and (6) could not be limited only to allegations set out in the general body of that paragraph. The sub-paragraphs particularised what the entire claim was founded upon, greater details of which were provided in the witness statements.

19. Bereaux JA, having determined that the trial judge made material errors and, critically, made no finding as to the cause of the PPH, reviewed the evidence relating to the events following the stillbirth of Mrs Lezama's fourth child.

The Court of Appeal's review of the evidence

The appellant

20. The medical notes written by the appellant immediately subsequent to Mrs Lezama's death and the relevant parts of his witness statement are set out at para 23 of Bereaux JA's judgment:

> "6 April 2003 - Postpartum Note
>
> Patient demised @ 10.10 pm after delivery occurred @ 4.53 pm.
>
> Almost immediately upon delivery of a peeling SB (stillbirth) XY (boy), there was significant bleeding which after repair of a median laceration at the post (posterior) fourchette, the PPH (postpartum haemorrhage) was controlled by IV (intravenous) Syntocinon drip and fundal massage ([about] 500 cc).
>
> However the BP (blood pressure) was shocking (systolic 40-70) and the PR (pulse rate) ↑ (increasing) and thready.
>
> Whole blood obtained and hung, but VS (vital signs) began to deteriorate rapidly.
>
> Dr H Chang was called and when the pulse stopped, EX (external) cardiac massage commenced and bag X ambu (ambu bag).
>
> 7.30 pm Upon Dr Chang's arrival - Defib (defibrillation) applied and meds given. Fluids and hemacel pushed. o/e (on examination) then, pupils fixed and dilated. Heart rate obtained 132, SR tachy and O2 sat 97. Decision to transfer to ICU (Intensive Care Unit) for further management. But

patient began to bleed again x̄PV(extremely per vagina) and from all venipuncture sites and orifices.

… HR (heart rate) ↓ (decreasing) and irregular. Unable to restore SR by … attempts to resus (resuscitate) halted @ 9:4 …"

21. The relevant parts of the appellant's witness statement are as follows:

"12. Almost immediately post delivery of the peeling still birth there was significant per vagina bleeding, which I estimated to be approximately 500 cc. The blood was pale, pink, and watery, not bright red, and was not clotting. The fact that the blood was not clotting in my experience usually is an ominous sign indicating a possible intravascular coagulopathy.

13. During delivery one will try to limit the amount of blood loss. The expected average volume of blood loss during delivery is about 200 to 300 cc. When there is about 500 cc or more of blood loss there is the need for even greater care. The definition of post partum hemorrhage is loss of 500 cc or more.

14. As I stated above, the delivery occurred quickly at 4.53 pm and the placenta was delivered immediately after and was complete and spontaneous. Upon realizing that there was this amount of blood loss I began to take steps to arrest it. Syntocinon was already administered at the delivery of the baby in order to achieve contraction of the uterus and therefore to diminish blood loss. On my instructions the nurse administered an additional dose of ten units of Syntocinon intravenously in an attempt to curtail blood loss …

15. At 5.00 pm 20 units of Syntocinon were added to the 300 mls of IV infusion. At 5.15 pm another litre of fluid, ringers lactate, was placed and another 20 units of Syntocinon were placed as well. The reason ringers lactate

was being administered was to attempt to expand the intravascular volume of the patient, in other words the volume in the patient's circulatory system.

16. At 5.15 pm the patient had lost less than an additional 300 cc of blood. At about that time the patient's blood pressure fell to 41 over 32 which indicated that she was in shock. Any patient going into shock after the loss of 800 cc of blood within 22 minutes is highly atypical, unless there is some other underlying factor. As I said above, the blood was not clotting and when I saw the blood was not clotting, due to my experience, I presumed that I had to be dealing with some sort of consumptive coagulopathy which is something that occurs in the presence of amniotic fluid embolism.

17. Karen Lezama's blood pressure loss/drop, as outlined above, could not be explained by blood loss. I diagnosed her as having an amniotic fluid embolus. An amniotic fluid embolus occurs when during labour, amniotic fluid, because of the contraction of the uterus, gets squeezed into the vessels of the uterus which then goes into the lungs and creates a significant reaction in the individual. This reaction takes the form of a combination of acute respiratory distress, acute cardiovascular collapse and usually a coagulation defect, which means that the patient has difficulty clotting and is at much greater risk of bleeding. Her blood pressure drop, loss of blood, blood not clotting etc was pathogonomic, which means it is absolutely typical of 'amniotic fluid embolism' and its attendant sequelae, or complications that come thereafter. The patient had presented no symptoms prior to delivery to indicate that an amniotic fluid embolus may have occurred. The occurrence of such an event may occur at the actual delivery process itself.

18. An amniotic fluid embolus is devastating with more than 50% mortality. It is a statistical occurrence, it cannot be prevented. I personally have attended at least five cases of this nature of which I am happy to say that all, except, one person, survived. The person who died after delivering did not have any significant bleeding at delivery and after

delivery she went back into her bed, sat up, spoke to the nurse and then fell dead.

19. Because of the blood loss I instructed that the patient be also administered a blood substitute. At 5.15 pm the first unit of blood substitute, haemacel, was hung in the IV …

20. The normal and accepted things that one would do to control 'post partum hemorrhage' would be to use oxytocics, to massage the uterine fundus, to ensure there are no vaginal lacerations actively bleeding, and to replace blood loss and to give a volume expander. All of which were done.

21. After delivery, the patient's fundus was being massaged continuously by the nurse. We did succeed in getting the blood pressure back up. At 6.15 pm her blood pressure was recorded as 103/67 and her pulse was 90 bpm. That was reasonable and we were observing the patient still because at this stage, the bleeding was not significant.

22. I also obtained two units of blood for her. The first unit was started at 7.36 pm. This blood was only obtained because of my intervention otherwise we would not be able to get blood at Stanley's. Stanley's did not carry any blood units. I was able to obtain these units because I demanded it from St Clair Medical an institution in which I have a relationship.

23. Between 5.15 pm and 9.45 pm the two units of blood were given and seven units of haemacel were given, in addition to volume expanders like ringers lactate and normal saline. There was no shortage of volume expanders and blood substitutes utilized ..."

(Dr Chang in his witness statement recorded that only three units of fluid were given to Mrs Lezama between 5.15pm and 7.30pm.)

"28. The patient was pronounced dead at 10.10 pm, despite my best efforts. On the death certificate I stated the

> primary cause of death as being disseminated intravascular coagulopathy. I explain this as follows, in the blood stream there are lot of blood factors that are involved in the clotting mechanism. In certain conditions all of these clotting factors are consumed and because you have a depletion in the level of clotting factors, the patient can begin to bleed, be it from, trauma, incisions or spontaneous occurrence. One of the conditions where disseminated intravascular coagulopathy can occur is with an amniotic fluid embolism ... The secondary cause of death was postpartum haemorrhage."

Mr Brian Lezama (para 24 of Bereaux JA's judgment)

22. Mr Lezama stated that as soon as the appellant removed the baby from the birth canal and thereafter the placenta, a "gush of blood and fluid gushed out covering all in its path". His wife was haemorrhaging profusely. The appellant gave instructions to the nurses to rub her tummy "and this would stop the haemorrhaging after some time". He continued stitching with great difficulty. The appellant complained that Mrs Lezama was bleeding so heavily that he could not see properly to do the stitching. Mr Lezama noted that under the delivery table there was a pan of soiled linen, "the fluids draining from the delivery table was overflowing the linen in it was fully drenched with blood and was overflowing into a river of blood on either side of the table". As the appellant continued stitching Dr Manning-Alleyne asked if he needed to use Haemaccel and he said "not at this time". He said he would continue to "rub-up the belly". "The river of blood" had reached at least three to four feet in either direction from the delivery table. Mr Lezama noticed that the blood was not as thick red as previously but a clear watery consistency.

23. Later, another doctor put his head around the door and asked the appellant if he needed assistance and the appellant abruptly declined "No". By 7.00pm his wife was unconscious, bleeding on the table with a nurse and the appellant rubbing her belly. Mrs Lezama was not responding to her husband, who was trying to speak to her.

24. Following his wife's death Mr Lezama saw the appellant and Dr Manning-Alleyne at the nurse's desk. He heard Dr Manning-Alleyne ask the appellant "What about the autopsy, surely doctor this is a coroner's case?" The appellant replied "No" and continued to fill out notes and the death certificate.

25. About a month later, not having heard from the appellant, Mr Lezama called at his offices. He asked the appellant what had caused his wife's death. The appellant said he believed it could have been an amniotic embolism, but there was no conclusive evidence to prove this was the case so he wrote "Post Partum Haemorrhage" on the death certificate. The appellant also said that an autopsy was not performed so he was not sure of his diagnosis and this is why he wrote "Haemorrhage and DIC (Disseminated Intra-vascular Coagulopathy) Stillbirth".

Dr Manning-Alleyne (paras 25-29 of Bereaux JA's judgment)

26. Dr Manning-Alleyne had been Mrs Lezama's paediatrician during her previous three pregnancies. As soon as Mrs Lezama delivered, she started to bleed profusely. The appellant and the nurse began to knead her abdomen. The doctor offered to go to the Port of Spain General Hospital to obtain more Syntocinon. On her way out, she saw another doctor, Dr Kuruvilla, and told him that the appellant had a patient with PPH. He said he would go back and assist. Upon Dr Manning-Alleyne's return, Dr Kuruvilla was no longer there. Only one IV line was in use. No blood or blood products had been given. None of her suggestions were acted upon and there seemed to be no urgency.

27. At around 7.30pm Dr Manning-Alleyne asked the appellant to give Mrs Lezama some blood. The appellant left to telephone. Following his return Dr Manning-Alleyne went to the St Clair Medical Hospital and collected the blood. Prior to leaving Mrs Lezama was described as "restless and shocky", she was being bagged with oxygen and her heart rate was slow. Dr Manning-Alleyne asked the appellant if she could start cardiac massage and he agreed. She also asked if she could call Dr Chang, an anaesthetist. The appellant agreed.

28. At para 23, Bereaux JA records that "By about 7.30 pm, Mrs Lezama was described by Drs Manning-Alleyne and Singh-Bhola as already basically dead."

Dr Harold Chang (para 30 of Bereaux JA's judgment)

29. The evidence of Dr Chang was contained in his witness statement and there was no challenge to the substance of it:

> "(1) On Sunday 6 April 2003 at around 7.30 pm I received a call from Dr Manning-Alleyne who asked me to come to

Stanley's Nursing Home to assist her friend, a patient, at Stanley's Nursing Home. Dr Achong Low was the attending obstetrician and had agreed for me to come to assist.

(2) I attended immediately and on my arrival about 15 to 20 minutes later I went into the delivery room. There were a lot of persons in the room and the place and atmosphere was chaotic. There were two drips up but only one was working. The patient who I later found out was Karen Lezama was comatose and had a cardiac arrest. The patient was being resuscitated via external cardiac massage and ventilated manually via Bag/Mask. The patient was also being given blood.

(3) My immediate reaction was to continue to implement the ABC's of resuscitation ie Airway, Breathing, Circulation. The airway was secured by inserting an endotracheal tube to make ventilation more effective, I also asked for the ECG monitor to be started.

(4) Attention to her Circulation was next. The working diagnosis was post-partum haemorrhage and the aim was to resuscitate her adequately by volume replacement of fluids of nonblood products and blood. Another intravenous access was put up via a central venous catheter and intravenous fluids run in.

(5) She was defibrillated at 8.25 pm and a heart rate of 132/minute and oxygen saturation of 98% was recorded at 8.40 pm.

(6) There were no haemoglobin tests done. The patient had been given three litres of fluid between the hours of 5.15 pm and 7.25 pm and the urine output was only 20 ml. This informs me that the intravenous resuscitation effort was not adequate and the patient was not adequately hydrated. If a patient is adequately hydrated the urine output would be at least 1/2 ml per kilogram per hour ie 35 mls/hour for a 70 kg adult.

(7) After her resuscitation for her cardiac arrest, ventilation and other supportive therapy was continued and a decision was made that the patient had to be taken to an Intensive Care Unit.

(8) Her condition continued to deteriorate and she arrested again and resuscitation efforts were restarted at 9.36 pm by Dr Achong Low. The patient was pronounced dead at 10.10 pm.

(9) I did not make notes of my attendance at Stanley's Nursing Home but I have refreshed my memory from the notes of the nurse, the doctor and the charts which are in the agreed bundle filed in the Court."

Dr Singh Bhola (paras 32-40 of Bereaux JA's judgment)

30. Dr Singh Bhola, a consultant obstetrician and gynaecologist and clinical lecturer, had been practising for four years in Trinidad and Tobago. She was the most junior of the obstetric and gynaecological experts. At paras 32 and 33 Bereaux JA described her written evidence as "quite compelling" and her written report as "detailed and objective".

31. At paras 33-38 Bereaux JA summarised relevant responses which were contained in Dr Singh Bhola's report which included the following:

"33. … Her opinion supported the use of syntocinon or more generally oxytocin as an appropriate drug to manage and stem the haemorrhaging (so did Drs Persad and Jibodh). She deposed that the most common cause of PPH is uterine atony (a soft non-contracted uterus). The use of oxytocic agents such as syntocinon would help to achieve contraction. This too was supported by Drs Persad and Jibodh …

34. … management would involve several steps which had to be undertaken simultaneously. Extra personnel should be called. It would also be necessary to contact the blood bank and the anaesthetist in case surgical intervention was

necessary. The patient's airway and breathing should be assessed. A high concentration of oxygen via a facemask should be administered. The circulation must be evaluated. Intravenous access should also be established to take blood for full blood count, coagulation screen, urea and electrolytes, and crossmatching. It would be necessary to commence infusion of crystalloid solutions such as normal saline or Ringer's lactate followed by infusion of colloids such as Haemaccel. Where there is a significant amount of blood volume lost, replacement of clotting factors such as fresh frozen plasma, platelet concentrates and cryoprecipitate is necessary. A foley's catheter should be inserted into the bladder to monitor the urine output. The patient's condition should be continuously monitored. An assessment of the cause of the bleeding must be made by clinical examination. Management is then directed to the underlying cause. Measures that can be used are simple non-medical interventions such as uterine massage, medical interventions such as use of oxytocic agents and surgical interventions such as hysterectomy. If the source of the bleeding is a coagulation disorder then replacement of the blood and clotting factors is essential.

35. … it is 'the clinical picture' that should be the main determinant of the need for blood and blood product transfusion. … The sooner blood and blood products are replaced, the greater the reduction in the risk of organ damage and death.

36. She found the following aspects of the care provided to have been substandard:

- The appellant failed to call for help in a timely manner. Despite the fact that an anaesthetist would have been invaluable, for example, in helping with resuscitation, maintaining the patient's airway and inserting lines, he was not called until two and a half hours after the delivery.

- The resuscitation was inadequate. Only three litres of fluid were given during the first two hours

after delivery. The fact that the patient remained cold, clammy, tachycardic, hypotensive and had little urine output would indicate that fluid replacement was inadequate. Even though seven units of colloids (haemaccel) were eventually given, most of this was after the first two hours. By this time the patient's condition had deteriorated significantly. Further, insufficient blood was given. Volume expanders (haemaccel) and blood were not given in a timely manner.

- No request was made for clotting factors. She said that 'if the cause of bleeding is due to a coagulation disorder (lack of clotting factors as in DIC) then replacement of blood and clotting factors is essential'. …

37. Dr Singh-Bhola also listed factors which made Dr Achong Low's diagnosis of AFE questionable:

(i) There was no evidence of cyanosis (bluish discoloration of the skin from lack of oxygen) which is often seen in patients with AFE.

(ii) The appellant stated that the degree of shock was not in keeping with the amount of blood lost and that the profound hypotension was due to AFE, not massive PPH. If this was the case, the patient's mucous membranes would have been pink and not pale as was stated in the nurses' notes. The patient's pallor would have suggested significant blood loss. The patient was cold, clammy, restless, tachycardic and hypotensive. These are all classic features of hypovolemic shock …

(iii) If the PPH was due to DIC secondary to AFE, the uterus would have been bleeding but well contracted. The measures instituted - continuous administration of oxytocin, rubbing the uterus continually for several hours after delivery - would not have been needed if the PPH was due to DIC secondary to AFE. These

> measures would have suggested uterine atony, which is the most common cause of PPH. This opinion was supported by the appellant in cross-examination when he conceded that DIC could not be controlled by fundal uterine massage.
>
> 38. Dr Singh-Bhola concluded that it would not have been possible, without a post-mortem, to say conclusively whether this was a case of AFE. She opined that while AFE was a possibility, the more likely possibility was that of massive PPH leading to DIC and ultimately death. She stated that PPH was not predictable or avoidable in this case. Once it occurred however it was not managed to a standard that was accepted as proper by the body of medical practitioners skilled in the field of obstetrics and gynaecology."

32. Dr Singh Bhola accepted that it was not unreasonable of the appellant to conclude that an AFE had occurred. That said, she "insisted" that in an emergency situation such as this she would have called for help from an anaesthetist "simply because they put up intravenous lines all the time and they are much better at getting blood than most other doctors are". She also maintained that blood fluid replacements were not given sufficiently quickly, Haemaccel was not given until the patient had significantly deteriorated.

Dr Persad (paras 46-51 of Bereaux JA's judgment)

33. Dr Persad is an obstetrician and gynaecologist practising in Trinidad. He stated that regulations in Trinidad and Tobago forbid storage of blood and blood products, storage is restricted to the main facility, being the blood bank at Port of Spain General Hospital, and two other hospitals. In Trinidad and Tobago there is a chronic shortage of blood and blood products. Dr Persad agreed that PPH due to uterine atony is the commonest form of maternal mortality globally. A diagnosis of AFE is made on "clinical suspicion". An autopsy may or may not confirm it.

Dr Jibodh (paras 52-56 of Bereaux JA's judgment)

34. Dr Jibodh is an obstetrician and gynaecologist who was working in Canada and he has also practised in Trinidad and Tobago. His evidence supported that of the appellant, namely that AFE was a primary cause of Mrs Lezama's death. He said that the appearance of non-clotting blood that occurred at the delivery suggests clinically that a coagulation disorder was occurring. It was Dr Jibodh's evidence that the patient should have been infused with blood and blood products, platelets and cryoprecipitate and had this been done the coagulation process might have been reversed.

35. Dr Jibodh said that he would try to obtain help from as many people as he could, for example, a haematologist, anaesthetist or a gynaecologist and he would make calls to the blood bank in order to obtain blood. He said that 85% of patients with AFE will die of cardiogenic shock. Asked whether he would record AFE in recording the cause of death Dr Jibodh stated that "this was the reasonable thing to apply to the certificate, yes".

36. At para 53 Bereaux JA records that Dr Jibodh was of the opinion that the diagnosis of AFE was a reasonable one due to the abrupt onset of hypotension, cardio respiratory failure and DIC leading to her death. While an autopsy result could have added to the diagnosis, AFE is generally diagnosed clinically by identifying characteristic signs and symptoms. Dr Jibodh described AFE as a rare event which could not have been anticipated. There is no data that any type of intervention would improve maternal prognosis with AFE. In Dr Jibodh's opinion, in view of the emergency that arose at the delivery and the resources available, the appellant acted in the best interest of the patient.

Determination of the Court of Appeal

37. Bereaux JA addressed the question: "Did the appellant diagnose AFE?" at paras 78-82. In summary, he found that:

(i) if AFE was the appellant's working diagnosis at the time of the emergency it would have affected his treatment of the patient;

(ii) it would have been reasonable for the appellant to have diagnosed AFE;

(iii) the continued rubbing of Mrs Lezama's stomach for four hours suggested that the working diagnosis was PPH caused by an atonic uterus rather than AFE, the appellant's evidence that he was rubbing "prophylactically" was "unpersuasive";

(iv) if AFE was operative in the appellant's mind it would have been made known to Dr Chang given his critical role in the emergency;

(v) it would have been reasonable for the appellant to enter AFE as a cause of death on the death registration certificate; the appellant's explanation for the omission, namely that he had made a presumptive diagnosis of AFE but as the death certificate was an official document he did not think it appropriate to include a presumptive diagnosis, was "unpersuasive";

(vi) the appellant's conclusion that the diagnosis was AFE was reached only after "sober reflection", he did not make the diagnosis at the time Mrs Lezama was haemorrhaging;

(vii) the appellant refused to request an autopsy, a finding which Bereaux JA stated affected his credibility.

38. As to the issue of whether the appellant's treatment met the *Bolam* standard Bereaux JA made the following findings (paras 83-97).

(i) There was a need for urgent and immediate infusion of blood. The appellant ought to have made a request for blood at 4:53 pm immediately upon the manifestation of the haemorrhage. The appellant's relationship with the St Clair Medical Centre was such that he was able to obtain blood from the facility and thus he had no difficulty obtaining blood for Mrs Lezama.

(ii) The hydration of the patient was inadequate. Only three units of fluid were given during the first two hours after delivery. The clinical signs indicated that fluid replacement was inadequate. Seven units of Haemaccel were eventually given but not as quickly as the condition of Mrs Lezama required. The second litre of Haemaccel was not commenced until 6:40 pm.

(iii) The appellant failed to call for professional assistance in a timely manner. An anaesthetist would have been invaluable in helping with the resuscitation,

maintaining the patient's airway and inserting lines. Dr Chang was not called until two and a half hours after delivery and was requested by Dr Manning-Alleyne rather than the appellant. By the time Dr Chang arrived Mrs Lezama was virtually dead. Further, the appellant refused Dr Kuruvilla's earlier offer of assistance. An earlier request for professional help would have given Mrs Lezama a greater chance of survival.

(iv) The findings summarised at (i)-(iii) above, belied the appellant's contention that he diagnosed AFE. The alleged diagnosis of AFE was made quite soon after the commencement of the haemorrhaging, yet no effort was made to obtain blood until 6:40 pm at the earliest. If in fact the appellant had made such a diagnosis, then his failure to move with alacrity to obtain blood and to call for assistance was "even more compelling of negligence".

(v) If the appellant's evidence that he had experience of five previous cases of AFE and had been successful in saving four of those patients was true, the appellant ought to have had more than a fair knowledge of how to successfully deal with such a condition.

(vi) In the alternative, even if the appellant did diagnose AFE he was still negligent for the reasons previously stated.

(vii) The insufficient infusion of volume expanders supported the trial judge's finding of a failure to administer sufficient medication to stop the bleeding and, in any event, was sufficient to support a finding of failure to exercise due care and diligence in the treatment of the deceased in all the circumstances of the case.

(viii) The fact that only one intravenous access was in operation prior to the arrival of Dr Chang contributed to the lack of hydration and was itself evidence of the appellant's negligence in failing to exercise all due care and diligence in the treatment of the deceased.

39. Bereaux JA concluded (para 98) that, having regard to all of the evidence and on a preponderance of probability:

> "(i) The appellant did not diagnose AFE as the cause of the DIC and PPH at the time of the emergency. His conclusion

was more likely arrived at upon reflection after Mrs Lezama's death …

(ii) The more likely cause of Mrs Lezama's death was massive PPH brought about by uterine atony leading to DIC and ultimately death. Dr Achong Low's original endorsement on the death certificate and his continued application of uterine massage for four hours also support this view. His attempts to explain away the death registration entries were unpersuasive. The fact that there was a massive haemorrhage is borne out by Mr Lezama's account … My own suspicion is that the volume of blood lost by Mrs Lezama is a lot more than the appellant was willing to admit. I accept the evidence of Dr Singh-Bhola set out at paras 37 and 38 above. Further, for the reasons set out at paras 83 to 97, I agree with Dr Singh-Bhola that once PPH occurred, it was not managed to a standard accepted as proper by a body of medical practitioners skilled in the field of obstetrics and gynaecology and it was this that caused Mrs Lezama's demise.

(iii) But, in the event that I am wrong that Dr Achong Low did not diagnose AFE and he did diagnose AFE, I say that for the same reasons, his treatment of the patient still fell below the Bolam standard. That negligent treatment, on a balance of probabilities, was the cause of the demise of Mrs Lezama and the appellant is liable in damages."

Grounds of appeal

40. The grounds of appeal are that the Court of Appeal erred in finding that:

(a) the appellant ought to have made a request for blood earlier;

(b) the appellant failed to call for help in a timely manner;

(c) the appellant failed to hydrate Mrs Lezama adequately;

(d) the appellant's negligent treatment was the cause of Mrs Lezama's death; there is no evidential basis for the finding that the appellant did not diagnose AFE during Mrs Lezama's haemorrhaging and instead arrived at the conclusion later;

(e) the cause of Mrs Lezama's death was massive post-partum haemorrhaging brought about by uterine atony leading to disseminated intravascular coagulopathy.

41. The parties were agreed that the following issues arise on the appeal:

(i) whether the Court of Appeal erred in finding that the appellant's treatment of Mrs Lezama was below the *Bolam* standard;

(ii) whether the Court of Appeal erred in finding that the appellant's treatment of Mrs Lezama caused her death on the application of the test set out in *Bolitho v City and Hackney Health Authority* [1998] AC 232 ("*Bolitho*");

(iii) whether the Court of Appeal erred in finding that the appellant's treatment of Mrs Lezama caused her death on the application of the *Bolitho* test;

(iv) whether the Court of Appeal erred in finding that the appellant did not diagnose Mrs Lezama with AFE;

(v) whether the Court of Appeal erred in failing to find that Mrs Lezama died as a result of complications from AFE.

The submissions of the appellant and the respondent

42. The appellant recognises the Board's practice of not interfering with concurrent findings of fact reached in the courts below subject to rare exceptions: *Devi v Roy* [1946] AC 508, 521; *Central Bank of Ecuador v Conticorp SA* [2015] UKPC 11; [2016] 1 BCLC 26, paras 4-8 ("*Central Bank of Ecuador*"). Justification has been found as a result of the court's erroneous approach to medical evidence (*Cleare v Attorney General* [2017] UKPC 38, paras 6-8) and an erroneous evaluative exercise (*Betaudier v Attorney General* [2021] UKPC 7, para 16). The appellant contends that the approach of courts

below to the medical evidence was erroneous and that they failed to carry out the evaluative exercise identified in *Bolitho*.

43. A pleading point is taken, namely that the trial judge and the Court of Appeal incorrectly held that the Particulars of Negligence set out at paras 10(4), (5) and (6) of the Statement of Claim, provided a stand-alone basis for alleging negligence on the part of the appellant. The particulars should be read in the context of the first paragraph of para 10 namely that Mrs Lezama was a "known bleeder", it having been accepted by the trial judge that the evidence did not establish this fact.

44. In oral submissions Mr Benjamin SC, on behalf of the appellant, focused on the issue of causation rather than negligence. The essence of his submission was that the courts below were in error when each decided that causation had been established without the detailed analysis of the evidence as to the cause, or causes of death, which is required following *Bolitho*.

45. It is the appellant's case that the diagnosis made by the appellant at the time he was treating Mrs Lezama following the stillbirth was AFE and that this was the cause of her death. It was accepted by the experts that this was a reasonable diagnosis. AFE, although uncommon, is a well-known cause of maternal death.

46. The appellant submits that he was entitled to have the issue of AFE fully and properly analysed upon the basis of an understanding of the expert evidence. The appellant also contends that in making adverse findings as to the appellant's credibility, the Court of Appeal fell into error. The appellant accepts that an appellate court should be cautious in interfering with a trial judge's findings of fact based on the assessment of the witnesses' credibility and substituting its own views.

47. The respondent contends that at the time of the events which led to the death of Mrs Lezama the diagnosis made by the appellant was not AFE. There is nothing in the evidence to demonstrate that he shared that diagnosis with those who were attempting to assist him. The respondent endorsed the death certificate with matters which he considered to be correct, he did not include a presumptive diagnosis of AFE, and he did not seek an autopsy.

48. The respondent submits that uterine massage is not the treatment for AFE. If AFE was the primary cause of DIC, there is no explanation from the appellant as to why he did not treat DIC. What he did treat was uterine atony. If he did diagnose AFE then his negligence is the greater as he was the doctor with most experience of AFE and he

does not explain why he did not treat it. Unchallenged is the expert evidence that blood was indicated from the earliest because of the ongoing DIC whether it was caused by AFE or PPH. Unchallenged is the expert evidence of the failure to call for professional assistance.

49. It is submitted by the respondent that there is nothing exceptional that would justify intervention by the Board in respect of concurrent findings of fact. In any event, it is accepted that there is no concurrent finding of fact upon the issue of causation.

The Board's view on the pleading point

50. There is nothing in this challenge. Rahim J and the Court of Appeal were correct to find that para 10(4), (5) and (6) of the Statement of Claim should be read in the context of the entirety of the pleading. It was a part of the original claim in negligence that Mrs Lezama was a gestational diabetic and a "known bleeder" but as the Court of Appeal concluded, there is no good reason to confine all of the particulars to those contentions. The Court of Appeal was correct to find that the particulars at para 10(4), (5) and (6) cannot be limited only to the allegations set out in the first paragraph of para 10. The particulars are stand-alone allegations which set out in more general terms the basis upon which the overall claim is founded.

The Board's view on negligence and causation

51. Mr Benjamin SC, with realism and judgment, directed his primary submissions to the issue of causation. This was realistic, not only by reason of the evidence, but also because of the findings made by the courts below. The Board will decline to interfere with concurrent findings of pure fact, save in very limited circumstances (*Central Bank of Ecuador*, paras 4 and 5). The findings made by the Court of Appeal were findings of fact and of negligence. That said, the findings were the subject of appellate review and thus any interference by the Board with such findings should be approached with caution. The findings are as follows, with the references being to the judgment of the Court of Appeal.

(i) The appellant should have taken steps to source and administer blood and blood products at an earlier stage (paras 85-86).

(ii) Blood was available in cases of emergency from the blood bank and the appellant ought to have made a request for blood at an earlier stage (para 87).

(iii) The appellant failed to call for help in a timely manner (paras 91-92).

(iv) The appellant failed to administer sufficient medication to stop the bleeding (para 94).

(v) There was only one intravenous access in operation which contributed to Mrs Lezama's lack of hydration (para 95).

(vi) The appellant failed to exercise all due care and diligence in the treatment of Mrs Lezama in all the circumstances of the case (para 94).

52. At the hearing before the Board no real attempt was made to undermine these findings. The duty to treat Mrs Lezama was that of the appellant, the emergency was his as the treating clinician. Whether the patient was suffering from AFE, or from uterine atony leading to PPH and DIC, there was a need accepted by the experts for the appellant and the respondent, for blood and blood products and for additional professional help. It was not until around 7.00pm, two hours after the bleeding started that the appellant made a request for blood. He made no request for further professional assistance, indeed he refused the offer of help from another doctor at the medical centre. The allegations of negligence were made out.

53. The finding of fact which is not a concurrent finding is that of the Court of Appeal at para 98 that the appellant did not diagnose AFE as the cause of the PPH and DIC. The more likely cause of Mrs Lezama's death was found by the court to be massive PPH brought about by uterine atony leading to DIC and ultimately death. It is to this issue that the appeal has been directed.

54. From the outset of these proceedings, as pleaded in the Defence, the appellant's case has been that Mrs Lezama died as a result of an acute cardiovascular collapse and DIC caused by AFE. No alternative cause of death has been postulated by the appellant.

55. The evidence before the Court of Appeal was that AFE was a reasonable diagnosis for the appellant to have made and that uterine atony can be a feature of

AFE. Whether the appellant diagnosed AFE was a factual question to be determined by the court on the evidence both of fact and expert opinion. This is what it did.

56. It is undisputed that Mrs Lezama suffered PPH immediately following the stillbirth which led to DIC and death. The critical issue is what caused the DIC: was it uterine atony which led to PPH and DIC or AFE which caused the PPH leading to DIC? In our judgment, a number of facts undermine the appellant's contention that it was his opinion, when he was in the delivery room, that the cause of the PPH and DIC was AFE. They are as follows.

(i) AFE is rare. Uterine atony leading to PPH commonly occurs.

(ii) The appellant's immediate response to the bleeding was to carry out or to instruct others to carry out uterine massage. His later explanation for four hours of uterine massage, namely that it was prophylactic, was rightly accorded little weight by the Court of Appeal.

(iii) The appellant told no one of his opinion that it was AFE during the hours between 5:00 pm and 10.00 pm when he and others were seeking to treat and save the life of Mrs Lezama.

(iv) Dr Chang who arrived at 7.50 pm and thereafter worked with the appellant in attempting to resuscitate Mrs Lezama and provide supportive therapy stated that the "working diagnosis" was PPH. The clinicians worked for some two hours to save the life of Mrs Lezama and a working diagnosis would have been at the clinical core of their efforts. There is no mention of AFE in Dr Chang's evidence which was compelling and unchallenged.

(v) There is nothing in the appellant's medical notes made immediately following Mrs Lezama's death which makes any reference to AFE. On the contrary, they refer to treating PPH. The notes are the closest to a contemporaneous recording of the appellant's opinion.

(vi) The death certificate is silent as to AFE. The purpose of the death certificate is to record the conclusion of the appropriate medical practitioner as to the cause of death. The appellant's subsequent explanation that it was only a presumptive diagnosis does not provide an adequate explanation as to why, in this important document, the treating clinician omitted any reference to what he now says was the working diagnosis. It is of note that his own expert, Dr

Jibodh, stated that it would have been reasonable to include this diagnosis on the death certificate.

(vii) At para 17 of his witness statement the appellant, in describing AFE states that the "reaction takes the form of a combination of acute respiratory distress, acute cardiovascular collapse and usually coagulation defect, which means that the patient has difficulty clotting and is at much greater risk of bleeding". Undisputed was the evidence of haemorrhaging, DIC and eventually cardiovascular collapse. The cardiac arrest did not occur until some two hours after the bleeding commenced. The evidence of acute respiratory distress is not mentioned until 7.30 pm, two and a half hours after the bleeding started. It was an observation by Dr Manning-Alleyne who stated that Mrs Lezama was demonstrating "air hunger", she was "… thrashing. She was thrashing about and she had lost consciousness as such. She was no longer communicative." It was the opinion of Dr Manning-Alleyne that by 7.30 pm Mrs Lezama had died.

(viii) No signs particular to AFE were present. No signs were present which could not be explained by the presence of uterine atony, leading to PPH and DIC. No factor was present which ruled out uterine atony leading to PPH and DIC.

(ix) The factors identified by Dr Singh Bhola at para 37 of the judgment, which in her opinion made the appellant's diagnosis of AFE questionable, have not been demonstrated to be unsound or unreasonable.

(x) If the appellant believed that Mrs Lezama was suffering from AFE, given his evidence that he had previously treated five patients for this condition four of whom had survived he, better than many, would have known what to do. That being so, he failed to call for blood or blood products, he did so knowing that his relationship with St Clair's Medical Centre was such that he could demand blood or blood products.

57. The most Dr Jibodh could say in support of the defence of the appellant to the allegations of clinical negligence is that "in view of the emergency that arose at the delivery and resources available at the time it is my opinion that Dr Achong Low acted in the best interests of the patient who unfortunately demised despite his best efforts". Dr Jibodh acknowledged in his report that the appellant needed to administer more blood and blood products but stated that he was not sure if they were available to him as Dr Jibodh was aware of the difficulty of obtaining these on an emergency basis. In his witness statement the appellant records that "blood was only obtained

because of my intervention otherwise we would not be able to get blood at Stanley's. Stanley's did not carry any blood units. I was able to obtain these units because I demanded it from St Clair Medical an institution in which I have a relationship." It would appear that the appellant's evidence undermines his expert's attempt to exculpate his failure to request blood or blood products for two hours following the onset of bleeding.

58. Further, it is of note that nowhere in Dr Jibodh's evidence is there an assertion that had blood or blood products been obtained timeously they would have made no difference to the outcome.

59. The Court of Appeal, in approaching the issue of causation, rightly considered the evidence not only of the clinicians but also that of Mrs Lezama's husband who graphically described the bleeding, the nature of and the amount of blood lost by his wife and the chaos in the delivery room.

60. Before the Court of Appeal and before the Board, the appellant's case has been that Mrs Lezama suffered AFE which led to DIC and her death. In approaching the issue of causation, the questions for the Court of Appeal were: (i) whether the appellant had diagnosed AFE as the cause of the PPH and DIC at the time of emergency? and (ii) whether, on the balance of probability, AFE was more likely than not to be the cause of her death?

61. It is clear from the judgment of Bereaux JA that each question was considered and answered by the court. In so doing, the court reviewed in detail and with care the relevant evidence of fact and expert opinion relating to the events which immediately followed the stillbirth of Mrs Lezama's child and led to her death. We are satisfied that there was evidence upon which the court could properly rely in finding as a matter of fact that in the hours between the stillbirth, and immediately following the death of Mrs Lezama, the actions of the appellant did not demonstrate a belief that what he was treating was AFE (para 56 above). If there was any doubt as to that, the absence of any mention of AFE on the death certificate was additional evidence of the state of mind of the appellant at the relevant time. Further, the court analysed the evidence of the experts and found, as it was entitled to do, that the evidence of Dr Singh Bhola supported the conclusion that at the relevant time the appellant had not made the diagnosis of AFE.

62. As to the credibility of the appellant, the challenge was less to his credibility, rather it was to his reliability in recalling the events of 6 April 2003.

63. In the judgment of the Board there was evidence before the court, both of fact and expert opinion, which it considered and which provided a sound evidential basis for its findings that: (i) the appellant did not diagnose AFE when providing medical treatment to Mrs Lezama on 6 April 2003; and (ii) the more likely cause of Mrs Lezama's death was PPH caused by uterine atony which led to DIC and her death.

64. In the absence of a successful appeal on the issue of AFE there is no alternative case for the appellant on causation. For the reasons given, the Board is satisfied that Court of Appeal was entitled to conclude that AFE was not a likely cause of the death of Mrs Lezama. Unless AFE has been proved to have been the cause of Mrs Lezama's death, there is no proper basis to challenge the findings of the Court of Appeal.

Conclusion

65. Accordingly, and for the reasons given, this appeal is dismissed. Further, the Board directs that there be payment out to the respondent of the assessed damages sums paid by the appellant into Court on 3 November 2015 together with accrued interest.