REPUBLIC OF TRINIDAD AND TOBAGO

IN THE HIGH COURT OF JUSTICE

PORT OF SPAIN

Claim No. CV 2008-00912

HCA No. 1797 of 2005

Between

BRIAN LEZAMA

(Administrator of the Estate of Karen Lezama, Deceased)

Claimant

And

DR. KONG SHEIK ACHONG LOW

Defendant

BEFORE THE HONOURABLE JUSTICE RICKY RAHIM

Appearances:

Mr. S. Marcus SC instructed by Ms. P. Dindial for the Claimant.

Mr. S. Young instructed by Mr. A. Bullock and Mr. Wong for the Defendant.

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JUDGMENT

1. This is a Professional Negligence action arising out of the death of Karen Lezama ("the deceased").

2. The Claimant is the Administrator of the Estate of Karen Lezama and has brought this action for the benefit of the estate and dependants of the deceased under the Supreme Court of Judicature Act Chap 4:01 and the Compensation for Injuries Act Chap 8:05.

3. The Defendant is and was at the material times a Specialist Obstetrician and Gynaecologist providing medical treatment to persons for reward at Good Health Medical Centre, located at 7 Fitzblackman Drive, Woodbrook and, from time to time, at Stanley's Clinic.

Issue of liability only

4. Both parties have agreed that having regard to the nature of the Claim, the court ought to try the issue of liability only at this stage. With this the court agreed and embarked upon a trial in relation to liability only.

Disposition

5. The judgement of the court is as follows;

i) Judgement for the Claimant against the Defendant on the issue of liability for negligence.
ii) The Defendant is to pay the Claimant's costs of the claim on the prescribed scale.
iii) Damages are to be assessed and Costs are to be quantified by a Master on a date to be fixed by the Court Office.

The Claim

6. The Writ of Summons and Statement of Claim were filed on the 29th July 2005.

7. The Claimant claims that:

   i. The deceased was a Gestational Diabetic and a known bleeder.

   ii. On the 2nd April 2003 at or around 7 p.m. the deceased, who was then in late pregnancy, was suffering from abdominal pains and on the direction of Dr. Weithers, a Defendant against whom this action was discontinued by consent, was admitted to Stanley's Clinic. She was diagnosed as being in "early labour" and bed rest was ordered.

   iii. The deceased was discharged from the Clinic at or about 9:30 a.m. on the 3rd April 2003. On the same date, the First Defendant requested the assistance of the Defendant for the care of the deceased.

   iv. The deceased was admitted to the Clinic under the care of the Defendant on the 6th April 2003 between 8:00 a.m. and 10 a.m. A drip was administered to induce labour.

   v. The deceased died on the 6th April 2003 at 10:10 p.m. allegedly from "*shock due to post partum haemorrhage*".

8. The Claimant alleges negligence on the part of the Defendant in that he:

   i. Failed to heed that the deceased was a "known bleeder" and to request, consult or to have due regard for the medical record of the deceased;

   ii. Failed to do or have done any blood investigations;

   iii. 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";

   iv. Failed to administer any or any sufficient medication to stop the bleeding;

v. *Failed to take urgent and immediate or any reasonable steps to stop the haemorrhage once it had started;*

vi. *Generally failed to exercise all due care and diligence in the treatment of the deceased in all circumstances of the case.*

9. The Claimant supplies Particulars of Special Damages at paragraph 11 of the Statement of Claim.

10. With respect to the claim under the Compensation for Injuries Act the dependants are:

i. The Claimant, age 41.

ii. Daniella Lezama the daughter of the Claimant and the deceased born on the 25th July 1992.

iii. Marisa Lezama the daughter of the Claimant and the deceased born on the 17th April 1994.

iv. Justin Lezama the son of the Claimant and the deceased born on the 29th May 1995.

It is to be noted that the baby which was the subject of the pregnancy of the deceased was found to be still born at birth. The baby was given the name Ryan.

11. The Claimant estimated the deceased's monthly earnings at $5,867.00 and detailed her total expenses to the sum of $5,130.00.

12. The Claimant therefore claimed, *inter alia*:

(1) Damages under the Supreme Court of Judicature Act, for the benefit of the estate of the deceased; and

(2) Damages under the Compensation for Injuries Act, for the aforesaid dependants and for the Plaintiff's said bereavement;

The Defence

13. The Defence of the Defendant was filed on the 2nd November 2005.

14. The facts according to the Defendant are that:

i. The deceased was a gestational diabetic but had previously experienced three uneventful deliveries, one of which the Defendant did himself.

ii. The deceased was admitted to Stanley Clinic on the 6th April 2003. He attended to the deceased on the 6th April 2003 because the First Defendant, who was the deceased's doctor, was out of the jurisdiction and he had agreed to cover the First Defendant's practice.

iii. He visited the deceased at the Clinic at approximately 11:00 a.m. on the 6th April 2003 and left after giving instructions that he was to be called back when the deceased was close to full dilation. He was called back at around 4:30 p.m. and upon his arrival in the delivery room. At approximately 4:53 p.m. the deceased had a normal spontaneous vaginal delivery of a "still born" baby boy.

iv. Almost immediately after the delivery there was vaginal bleeding with evidence that the deceased's blood was not clotting. He directed that she be given more units of syntocinon and fluids intravenously for what he assessed as the deceased having coagulation problems.

v. He observed that around 5:15 p.m. the deceased's blood pressure had fallen and that she was going into shock.

vi. The deceased suffered an amniotic fluid embolism and despite his treatment of the deceased, which was at all material times in accordance with the practice accepted and recognized as proper by the body of medical practitioners skilled in the field of Gynaecology and/or Obstetrics,

she died at around 10:10 p.m. on the 6th April 2003 as a result of an acute cardiovascular collapse and disseminated intravascular coagulopathy caused by amniotic fluid embolism.

15. The Defendant expressly denied that the deceased was a known bleeder or that he was guilty of any negligence and/or failed to use reasonable care and/or diligence in or about any treatment, attendance and/or advice given to the deceased. He further denied that any treatment, attendance and/or advice given to the deceased by him caused and/or contributed to the death of the deceased.

16. The Defendant also asserted that he obtained the necessary amounts of blood required by the deceased and did administer such amounts of blood to the deceased while she was under his care.

17. The Defendant averred that he did take all steps necessary in accordance with the practice accepted and recognized as proper by the body of medical practitioners skilled in the field of Gynaecology and/or Obstetrics at all material times.

Issue of liability only

18. Both parties have agreed that having regard to the nature of the Claim, the court ought to try the issue of liability only at this stage. With this the court agreed and embarked upon a trial in relation to liability only.

The Evidence on behalf of the Claimant

19. The evidence on behalf of the Claimant was given by the Claimant and nine other witnesses, namely (1) Dr. Mary Singh-Bhola, (2) Dr. Harold Ian Chang, (3) Mr. Howard Cayenne, (4) Professor Hubert Daisley, (5) Dr. Petronella Manning Alleyne, (6) Ms. Margaret Rose D'Hereaux, (7) Dr. Waveney Charles, (8) Mr. Wayne Rostant, and (9) Shaun Jodhan. Due to the nature of the circumstances and complexity of the expert evidence the court finds it necessary to set out summaries of all the relevant evidence.

20. The evidence of Mr. Howard Cayenne, Mr. Wayne Rostant and Shaun Jodhan relate to the issue of damages and shall not be dealt with herein.

The Claimant

21. The Claimant's evidence in chief was contained in his witness statement filed on 15th February 2011.

22. The Claimant testified that he and the deceased were married on the 8th March 1992 and together had four children namely, Danielle Lezama, Marisa Lezama, Justin Lezama and Ryan Lezama (still born).

23. By Letters of Administration dated 26th March 2004 the Claimant became the Administrator of the estate of the deceased, who died on the 6th April 2003.

24. The Claimant testified that although the First Defendant was the deceased's Obstetrician/Gynaecologist for all her pregnancies, the Defendant delivered his last son Justin and the still born baby, Ryan.

25. The Claimant gave evidence that in all the deceased's pregnancies her blood sugar level rose and that during her pregnancy with Ryan it was the same. As such, the deceased regularly visited the First Defendant and had lab tests done on a regular basis.

26. The Claimant testified that the deceased was instructed by the First Defendant to lose weight and follow a diet, which she did.

27. The Claimant also testified that there were routine ultrasounds by the Defendant throughout the deceased's pregnancy with Ryan which showed the progress of the foetus with normal growth, the last ultrasound being done on the 3rd April 2003.

28. The Claimant however testified that at no time during the nine months pregnancy with Ryan was the deceased asked to have blood donated. The court interprets this to mean that the deceased was not asked to have pints of blood on standby in event of the need arising.

29. On the 2nd April 2003, the Claimant testified that the deceased began to feel contractions and was advised by Dr. Petronella Manning-Alleyne, the paediatrician for all her

children, to go to Stanley's Clinic. It was the Claimant's evidence that at the nursing home, the deceased was not attended to by the First Defendant, but was kept overnight. The Claimant testified that the deceased was discharged the following day, the 3rd April 2003.

30. The Claimant testified that the deceased attended her routine visit with the First Defendant and had an ultrasound performed by the Defendant on that day.

31. The Claimant gave evidence that the deceased complained on the 4th April 2003 that she was not feeling movement from the baby. On Sunday 6th April 2003 he took the deceased to the nursing home at about 7:30 a.m. It was the Claimant's evidence that he called Dr. Manning-Alleyne and the nurses called the Defendant. The nurses then took readings of the baby's heartbeat and the deceased's progress.

32. The Claimant testified that at around 11:00/11:30 a.m. the Defendant informed him and the deceased that the baby was dead and it had to be delivered naturally. Instructions were then given to the nurses by the Defendant to start a drip to induce labour. The Claimant testified that the Defendant then left.

33. The Claimant's evidence was that around 2:00 p.m. that day the deceased began experiencing contractions and she was taken into the delivery room. The Claimant testified that the Defendant was not present in the delivery room at that time and only appeared when the nurses had almost delivered the baby completely. The baby was still born at 4:48 p.m. and weighed 8lbs 6ozs.

34. Dr. Manning-Alleyne was present in the room at the time of delivery. The Claimant gave evidence that when the Defendant entered the room, Dr, Manning-Alleyne immediately informed the Defendant that the deceased had experienced Postpartum Haemorrhage with her three previous deliveries.

35. The Claimant testified that when the Defendant removed the baby there was an abundance of blood. The Claimant gave evidence that the Defendant stated that the

deceased was torn during delivery and that he could not see properly to do the stitching because she was bleeding profusely.

36. The Defendant instructed the nurses to rub the deceased's stomach and that that action would stop the bleeding. The Claimant testified that at one point Dr. Manning-Alleyne asked the Defendant if he needed to use Hemicycle and he said "not at this time". The Claimant testified that the deceased then started complaining of not being able to feel her legs. The Defendant stated that all he had to do was rub the deceased's stomach for 3-4 hours and everything would normalize. It was at this point that Dr. Manning-Alleyne stated she was going to draw blood to run some quick tests which she did.

37. The Claimant's evidence is that the Defendant refused the help of Dr. Ajit Kuruvilla and noted that he would have to send for blood for the deceased. The Claimant testified that the deceased then became unresponsive and that Dr. Manning-Alleyne alerted the Defendant of her condition, to which the Defendant seemed unaware. The Claimant was then asked to leave the room at around 7:00 p.m.

38. After a short time in the hallway, the Claimant testified that he wandered back to the delivery room where he observed Dr. Manning-Alleyne rubbing the deceased's chest while the Defendant was still rubbing the deceased's stomach. He was then told to leave again.

39. When he returned to the hallway the Claimant stated that he could see through the doors to the delivery room and he stood staring in for a while. The Claimant then went back into the delivery room where the Claimant said he observed another doctor, Dr. Harold Chang attempting to insert a needle in the deceased's vein which Dr. Chang stated he could not find because her veins had collapsed. The Claimant testified that the deceased was unconscious and that a nurse was standing by her head squeezing a ventilator bag over her face. The Claimant was asked again to leave the room.

40. The Claimant gave evidence that shortly after leaving the room this time, the doctors came into the hallway and asked that the immediate family go into an adjoining private room to have a conference. He testified that when they gathered the Defendant informed

them that the deceased's condition was deteriorating and that he wanted to get her hooked up to a respirator. The Defendant then advised that the deceased be taken to the St. Clair Medical Hospital. During this meeting, a nurse summoned the doctors back into the delivery room. The Claimant testified that he also went into the delivery room where he observed that the deceased had gone into cardiac arrest. This, he said, was around 9:40 p.m.

41. The Claimant testified that the doctors attempted to stabilise the deceased but to no avail. The Claimant also testified that the Defendant used paddles to shock the deceased, but there was a flat line on the monitor. At about 10:10 p.m. the Claimant testified that the Defendant walked out of the delivery room after his attempts to resuscitate the deceased failed.

42. The Claimant gave evidence that on the 17th April 2003 he went to Stanley's maternity Clinic to settle the outstanding bills for the deceased's care. He gave evidence that while there he requested the deceased's file but was refused.

43. About one month later, the Claimant testified that he visited the Defendant's office where he spoke to the Defendant about the cause of the deceased's death. According to the Claimant, the Defendant stated that he believed it could have been an amniotic embolism but that there was no conclusive evidence to prove this so he wrote "Post Partum Haemorrhage" on the Death Certificate. The Claimant testified that the Defendant also told him that since no autopsy was performed, he was unsure of the diagnosis and that is the reason he wrote Haemorrhage and D.I.C. (Disseminated Intra-vascular Coagulopathy).

44. The Claimant gave evidence that the First Defendant visited his home sometime in June 2003 and stated that she had previously had one case similar to that of the deceased. She noted to the Claimant, however that in that case the patient's family had arranged beforehand about nine pints of blood and that the patient had survived because of this. The court finds however that the proceedings having been discontinued against the First Defendant, this evidence amount to hearsay and no weight will therefore be given to it.

45. The Claimant also gave testimony by witness statement in relation to medical and other expenses along with other matters which would be relevant to an assessment of damages. However, it being the function of the court at this stage to decide the issue of liability, the matters relevant to quantum are not herein set out.

Dr. Mary Singh-Bhola

46. Dr. Bhola's expert report was filed on the 30th June 2011. She stated her qualifications as MBBS (WI), MRCOG (Member of the Royal College of Obstetricians and Gynaecologists UK since 2002) and CCST (Certificate of Completion of Specialist Training UK). Dr. Bhola testified that she had been practising as an Obstetrician/Gynaecologist for four years.

47. Dr. Bhola was asked to give her expert opinion on the following questions in relation to the present case:

    i. What preparation for delivery is undertaken of the mother and is acceptable by a medical practitioner skilled in the field of Obstetrics and Gynaecology assuming a mother has a history of post partum haemorrhaging?

    ii. Would a medical practitioner skilled in the field of Obstetrics and Gynaecology recognize that there is an association between a macerated still born and a mother dying of disseminated intravascular coagulation (DIC)? And if so, would that association be influenced if there was a maternal diabetic status?

    iii. In an emergency when there is post partum haemorrhaging what is the practice accepted as usual practice by a body of medical practitioners skilled in the field of Obstetrics and Gynaecology?

iv. What products would a medical practitioner skilled in the field of Obstetrics and Gynaecology have available for stopping uterine haemorrhaging in the presence of post partum haemorrhaging?

v. In an emergency, how does a medical practitioner skilled in the field of Obstetrics and Gynaecology manage post partum haemorrhaging?

vi. Is there any assistance that a laboratory can give with respect to a determination of the extent of the haemorrhaging? Would such information guide the response?

vii. What blood products would a medical practitioner skilled in the field of Obstetrics and Gynaecology utilize in the treatment of post partum haemorrhaging?

viii. How does the timing of the administration of these blood products influence the outcome?

ix. How does a medical practitioner skilled in the field of Obstetrics and Gynaecology determine the quantity and variety of blood products to be used?

x. From the documents available, can you state whether the deceased has a history of post partum haemorrhaging?

48. Dr. Bhola opined that if a mother had a history of postpartum haemorrhaging (PPH) a medical practitioner skilled in the field of Obstetrics and Gynaecology would

(i) Ensure that the patient had a normal haemoglobin level before delivery. She stated that the deceased had a normal haemoglobin level of 11.9 g/dl at the beginning of her last pregnancy which would have been maintained by the prenatal vitamins she had been taking.

(ii) Establish intravenous access when the patient is admitted for labour to replace fluids in the event of PPH. This she said was done in relation to

the deceased to allow for the oxytocic infusion at the start of induction of labour.

(iii) Take blood for a complete blood count and group cross match. This was not done in relation to the patient.

(iv) Actively manage the interval between delivery of the baby and delivery of the placenta (third stage of labour) which involves administering an oxytocic agent such as syntometrine or syntocinon with the delivery of the anterior shoulder of the baby. In relation to the deceased, syntocinon was administered at the appropriate time.

49. It was Dr. Bhola's opinion that although there was a link between an intrauterine foetal demise (IUFD) and the risk of DIC, this risk was extremely low and usually did not develop until the foetus has been dead for about four weeks. In the case of the deceased, the doctor explained that since the foetus was dead for less than one week and immediate steps were taken to induce labour, the risk of DIC could reasonably be assumed to be extremely low. She stated that the association of DIC and IUFD was not influenced by a history of diabetes.

50. Dr. Bhola listed the steps to be taken in an emergency when there is PPH as:

i. Assess the patient's condition (is the patient shocked, restless, unconscious etc). In this regard, Dr. Bhola testified in cross examination that there was nothing in the documents provided of the deceased's care to suggest that the Defendant did not do this.

ii. Resuscitate the patient using the ABC approach, that is, after checking the patient's airway and breathing, the patient's circulation is attended to. Again, Dr. Bhola testified that there was nothing to suggest that the Defendant did not do this.

iii. Determine the cause of bleeding. Dr. Bhola testified that the main way to do this was by clinical examination of the patient and there was nothing to suggest that the Defendant did not do this.

iv. Having determined the cause, manage according to arrest bleeding. Dr. Bhola testified that this means that once a clinical assessment is made of the cause of the bleeding you actively try to manage it to reduce and bring to a stop to the bleeding. She testified that there was nothing to suggest this was not done.

51. To stop uterine haemorrhaging in the presence of PPH, Dr. Bhola opined that the products which would be available are oxytocic agents like syntocinon, syntometrine or carbetocin and prostaglandin agents like misoprostol. Dr. Bhola explained that uterine atony (soft, non-contracted uterus) is the commonest cause of PPH and these products are to achieve contractions.

52. Dr. Bhola advised that in an emergency, where PPH is identified, management would involve:

i. Communication – this involves calling extra personnel, blood banks regarding availability of blood and blood products, anaesthetist in case surgical intervention is necessary.

ii. Evaluation and Resuscitation – the urgency and measures undertaken to resuscitate and arrest haemorrhage need to be tailored to the degree of shock (i.e. the amount of blood already lost as well as the amount and rate of ongoing bleeding). This involves the use of the ABC method and taking of blood for full blood count, coagulation screening, urea and electolytes and cross matching.

Initially, infusion of crystalloid solution such as saline or ringer's lactate followed by infusion of colloids such as Haemaccel or Gelofusine ought to

be carried out. A Foley's catheter should be inserted to monitor the urine output.

iii. Monitoring and Investigation – the patient's condition (pulse, blood pressure, respiratory rate, oxygen saturation etc) should be continuously monitored.

iv. Arresting the bleeding – an assessment of the cause is made by clinical examination and the management is directed to the underlying cause. The causes for PPH may be considered to relate to (1) tone (abnormalities of uterine contraction), (2) tissue (retained products of conception), (3) trauma (of the genital tract) or (4) thrombin (abnormalities of coagulation). Some measures used in management of the bleeding include:

a) Simple non-medical interventions like uterine massage (rubbing of the uterus) or bimanual compression (squeezing the uterus between two hands);

b) Medical interventions like the use of oxytocic agents or prostaglandins;

c) Surgical interventions like intra-uterine balloon tamponade, compression sutures, litigation of blood vessels that supply the uterus or hysterectomy. Dr. Bhola however testified that intrauterine balloon tamponades are not available in Trinidad either in public health facilities or private ones. Further Dr. Bhola acknowledged that in such a situation as that presented with the deceased, where the patient was bleeding profusely, unstable and in shock, she would not have done compression sutures. Dr. Bhola further testified that litigation of blood vessels, which is the tying off of blood vessels in the uterus to avoid the blow of blood from the uterus, would not have been

done on the deceased in her condition at the time; neither would she have done a hysterectomy on the deceased.

d) If the cause of bleeding is due to a coagulation disorder, then replacement of blood and clotting factors is essential.

53. Dr. Bhola suggested that the clinical picture should be the main determinant for the need for blood and blood product transfusion and time should not be wasted waiting for laboratory result despite the fact that laboratory investigations may help guide the clinician.

54. Dr. Bhola itemized the blood products used in the treatment of PPH as:

    i. Blood (in the form of packed red cells);

    ii. Platelet concentrates;

    iii. Fresh Frozen Plasma (contains clotting factors)

    iv. Cryoprecipitate (also clotting factor).

55. Dr. Bhola opined that the sooner blood and blood products are replaced, the less the risk of organ damage and death. She cited that the Confidential and Enquiry into Maternal Deaths (a UK report produced every three years) has highlighted that one of the major factors in the adverse outcomes associated with severe haemorrhage is a delay in initiating appropriate management.

56. Dr. Bhola explained that initially clinical assessment guides practitioners in determining the quantity and types of blood products to be given. For example:

    i. By estimating the volume of blood already lost;

    ii. The signs and symptoms which the patient may have;

    iii. The pulse/blood pressure/urine output etc;

    iv. The rate at which ongoing bleeding is taking place;

v. Whether blood is clotting or not.

57. Subsequently, the amount of fluids to be replaced is helped by the use of central venous pressure (CVP) line which is inserted by the anaesthetist as well as by laboratory results.

58. Dr. Bhola stated that from the documents provided there was no evidence that the deceased had a history of PPH.

59. Dr. Bhola concluded that since the deceased had no obvious risk factors for PPH it was not substandard care to not have blood available. She opined that the recommended induction of labour was a suitable method for birthing the foetus. Further, she stated that the initial first line of measures to deal with the occurring PPH such as uterine massage and oxytocin administration were employed.

60. Dr. Bhola identified the following areas of care to be substandard by the Defendant:

i. Failure to call for help in a timely manner. The anaesthetist was not called until two and a half hours after delivery. An anaesthetist would have been invaluable in helping with resuscitation, maintaining the patient's airway, inserting lines etc.

ii. Inadequate resuscitation. The fact that the deceased remained cold, clammy, tachycardic, hypotensive and had little urine output would indicate that fluid replacement was inadequate. Although seven units of colloids (haemaccel) were given, this was after the first two hours, by which time the patient's condition had significantly deteriorated. During cross examination it was Dr. Bhola's testimony that although the Haemaccel was administered when the deceased went into shock, it appeared to have been given at a slower pace than what she would expect in an emergency situation as the one presented. Additionally, insufficient blood was given and in an untimely manner.

iii. No request was made for clotting factors. The blood which was transfused would have been packed red cells and not whole blood and so would not

have had any clotting factors. Fresh Frozen Plasma (FFP) which contains clotting factors should have been requested early especially as the Defendant stated that he recognised immediately that it was a case of DIC (i.e. that the blood was not clotting). Although the correct drug, Syntocinon, the amounts used were insufficient.

iv. Alternative interventions not considered. Despite using syntocinon, the uterus remained atonic as uterine massage continued to be employed. If one drug fails it is good practice to consider other drugs such as syntometrine or misoprostol. It was unclear whether these were considered and not available or whether they where not considered at all. During cross examination, Dr. Bhola testified that this drug had several side effects and should not be used on persons with heart problems, blood pressure issues, where there is some infection of the blood. Additionally, Dr. Bhola testified that possible side effects included difficulty breathing and shock. Therefore in dealing with a patient who presents with these issues, a physician should be cautious when administering this drug. When medical intervention fails to achieve uterine contraction and so control PPH, early recourse to surgical intervention should be considered. This was not done in this case.

61. While the Defendant claimed that this was a case of amniotic fluid embolism (AFE), Dr. Bhola highlighted features in the deceased's case which would make this diagnosis questionable:

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

ii. If the profound hypotension was due to AFE and not massive PPH as the Defendant aver, the patient's mucous membranes would have been pink and not pale as is documented in the nurses' notes. The pallor noted

suggests significant blood loss and the patient's cold, clammy, restless, tachycardic and hypotensive state were features with hypovolemic shock.

iii. The commonest cause of PPH is uterine atony. The fact that oxytocin was continuously administered and that the uterus continued to be rubbed up for several hours after delivery would suggest that the uterus was atonic resulting in massive blood loss and ultimately death. If the PPH was due to DIC secondary to AFE, the uterus would have been bleeding but well contracted, and so not needed the measures instituted. The appropriate management in that case would have been to replace the clotting factors which were not done.

62. Dr. Bhola concluded that the more likely possible cause of death, without having the benefit of a post-mortem, was a massive postpartum haemorrhage leading to disseminated intravascular coagulation and ultimately death and not AFE. She opined that PPH was not predictable or avoidable, but that the management was not up to a standard accepted as proper by the body of medical practitioners skilled in the field of Obstetrics and Gynaecology.

63. During cross examination Dr. Bhola testified that AFE is an extremely rare occasion, and the literature suggests that many physicians may not even experience this in their practice as OBGs throughout their careers.

64. Dr. Bhola testified in cross examination that the process she has done for obtaining blood from the National Blood Transfusion Service (the Blood Bank) in an emergency situation at a private healthcare facility is to tell a member of the team, usually a nurse that she needs a certain amount of blood. The nurse would then call into the Blood Bank and inform them that blood is needed. A sample of blood is taken from the patient and a courier would be sent from the private healthcare facility to the Blood Bank to obtain the blood. The blood would sometimes be returned to the facility one to two hours later, depending on the availability of the blood and staffing. Dr. Bhola testified that she has never requested blood on a Sunday.

65. Dr. Bhola had noted in her report that the blood which was transfused to the deceased would have been packed red cells and not whole blood. She explained in cross examination that whole blood is blood that contains red blood cells and clotting factors. Despite this, Dr. Bhola acknowledged that in the report prepared by the Defendant he stated that he used whole blood. She testified that she had no reason to disbelieve this evidence of the Defendant.

66. Dr. Bhola further explained that when she used the term "clinical condition" as a means of managing the situation, it meant the patient's overall condition; whether the patient is unconscious, restless, her pulse, blood pressure. By doing this, Dr. Bhola testified that she would be making a personal assessment based on her knowledge and experience of what is presenting itself in front of her.

67. Dr. Bhola explained that a pregnant woman can tolerate more blood loss than a normal, healthy human. This is because the blood volume of a pregnant woman increases by about 30% to 40% of the normal volume which is five to six litres of blood. The normal expected blood loss upon delivery is usually 200 ml to 300ml and anything that crosses 500 ml is by definition PPH. Dr. Bhola explained further that the fluid that initially flows out after delivery contains not only blood but also amniotic fluid.

68. Dr. Bhola explained in cross examination that AFE had two stages. In the first stage the patient experiences acute shortness of breath, hypertension, and extremely high blood pressure. The second phase is known as the haemorrhagic phase and involves severe shivering, coughing, vomiting, and excessive bleeding as the blood looses the ability to clot. Dr. Bhola accepted that in a case of AFE there are a number of signs that may present in varying frequencies including hypotension (100% frequency), foetal distress (100% frequency), pulmonary oedema (93% frequency), cardiopulmonary arrest (87% frequency), cyanosis (83% frequency), coagulopathy (83% frequency), dysoniea (49% frequency), seizures (48% frequency), uterine atony (23% frequency), bronchospasm (15% frequency), and transient hypertension (11% frequency). It is by clinical assessment of the patient and the signs presented in determining AFE. Despite the fact that many of

the signs stated did present (nine signs) itself in the deceased's case, Dr. Bhola concluded that PPH was a more likely cause of death.

Dr. Harold Ian Chang

69. Dr Chang's evidence in chief was contained in his witness statement filed on the 15th February 2011.

70. Dr. Chang is an anaesthetist and has been an anaesthetist for 37 years. On the 6th April 2003 around 7:30 p.m., Dr. Chang was called to the Stanley's Nursing home by Dr. Manning-Alleyne to assist in the care of the deceased.

71. His evidence was that when he went into the delivery room about 15 to 20 minutes after he arrived at the nursing home, there was a lot of people in there. He testified that although two drips were set up, only one was in use. The deceased was comatose and had had a cardiac arrest. The deceased was being resuscitated with external cardiac massage and ventilated manually via bag/mask and was being given blood.

72. Dr. Chang testified that he employed the ABC method and on reaching the Circulation stage, he had another intravenous access put up via a central venous catheter to replace fluids of non-blood and blood products. The working diagnosis was PPH.

73. The deceased was defibrillated at 8:25 p.m. and her heart rate was 132 per minute and oxygen saturation of 98% was recorded at 8:40 p.m. No haemoglobin tests were done.

74. Dr. Chang testified that the intravenous resuscitation effort before he arrived was not adequate and the patient was not adequately hydrated. This, he testified, was known because the patient had been given three litres of fluid between 5:15 p.m. and 7:25 p.m. and her urine output was only twenty millilitres. A patient adequately hydrated would have a urine output of at least half a millilitre per kilogram per hour.

75. A decision was then taken to move the deceased to the Intensive Care Unit. However her condition deteriorated and she was pronounced dead at 10:10 p.m.

76. Dr. Chang testified that the evidence contained in his witness statement was based partly on nurse's notes which he perused and on memory of what occurred while he was at the nursing home.

Professor Hubert Daisley

77. Dr. Daisley's expert report was filed on the 30th June 2011. Dr. Daisley is a pathologist and has performed in excess of thirty thousand autopsies and has reviewed millions of Histology slides. He holds a BSc in special Chemistry (1971), BSc special in Medical Microbiology (1975), MBBS Bachelor of Medicine, Bachelor of Surgery (1979) and a Doctorate in Medicine in Histopathology D.M. (1985).

78. Dr. Daisley was asked to provide his expert opinion on:

    i. The possible cause/causes of the death of Karen Lezama and whether the circumstances warranted a post mortem examination.

    ii. The possible cause/causes of Disseminated Intravascular Coagulopathy given the fact that the deceased was a gestational diabetic who delivered a still born macerated infant.

    iii. The cause/causes of an infant being born with peeling skin.

79. Dr. Daisley opined that the deceased died from hypovolaemic shock (loss of large volume of blood) following PPH. He further stated that she delivered a macerated stillborn baby and was a gestational diabetic. In cross examination Dr. Daisley explained that he formed his opinion on the cause of death based on the clinical information given to him through the notes of the Defendant and the nurses as well as by his experience

80. Dr. Daisley listed the possible causes of PPH as:

    i. Uterine atony: the inability of the uterus to contract which may lead to continuous bleeding. Retained placenta tissue and infection may contribute to uterine atony.

ii. Trauma from the delivery may tear tissue/vagina/cervix/uterus and vessels leading to significant PPH.

iii. Tissue retention from the placenta or foetus may lead to bleeding.

iv. Bleeding disorders occur when there is a failure of clotting such as with diseases known as coagulopathies, for example, Disseminated Intravascular Coagulation (DIC).

81. Dr. Daisley opined that in the deceased's case uterine atony contributed to the bleeding and her eventual death. In addition trauma to her vagina (laceration to her posterior fornix) contributed to blood loss. Dr Daisley corrected this in cross examination and testified that based on the Defendant's notes it was the posterior fourchette that had been lacerated. The posterior fornix, he explained was on the inside of the vagina, to the back, while the posterior fourchette was on the outside of the vagina and forms part of the posterior margin of the vulva. Despite this confusion with the exact area of the laceration, Dr. Daisley maintained that any bleeding would have contributed to PPH.

82. Dr. Daisley opined in his report that the deceased could have suffered a ruptured uterus causing severe haemorrhaging and uterine atony. Additional, the deceased might have retained placental tissue in her endometrium which could have contributed to her PPH and might have also led to a coagulopathy namely DIC with PPH. However, in cross examination Dr. Daisley accepted, based on the nurses notes, that the placenta was completely delivered. Dr. Daisley stated that an autopsy would have been necessary to confirm these findings.

83. It was Dr. Daisley's opinion that an autopsy was mandatory in this case. Maternal death during childbirth is considered a Coroner's case consequently this case ought to have been reported to the St. Clair police and the protocol for a coroner's autopsy should have been followed. Dr. Daisley's belief was that the Defendant's diagnosis of AFE/DIC as the cause of death was speculative as he failed to do the relevant laboratory tests to confirm and to treat the condition of DIC. Dr. Daisley was also of the view that an autopsy ought to have been performed on the still born child as well.

84. Dr. Daisley listed the following as some of the possible causes of DIC:

    i. AFE;

    ii. Retained products of conceptions;

    iii. Intrauterine death;

    iv. Abruptio Placenta;

    v. Ruptured uterus;

    vi. Hypovolaemic Shock;

    vii. Acute fatty liver of pregnancy; and

    viii. Sepsis

85. Despite this list, Dr. Daisley opined that it would be difficult to disprove or prove these conditions in the absence of an autopsy. It was Dr. Daisley's belief that the Defendant should have done at least a complete blood count (CBC), a prothrombin time (PT), a partial thromboplastin time (PTT), D-Dimer test and Fibrinogen. These tests would have confirmed or disproved the Defendant's diagnosis of DIC.

86. It was Dr. Daisley's opinion that although the Defendant made the diagnosis of DIC he made no attempt to treat it. Treatment, he explained, would have included the administration of platelets, fresh frozen plasma, whole blood, heparin and clotting factors. Although whole blood was given, Dr. Daisley was of the view that the administration of two units of blood and isotonic solutions could not reverse DIC. Dr. Daisley admitted in cross examination that one of the possible side effects of heparin was aggravated bleeding. Dr. Daisley further explained that if one goes into shock and is transfused isotonic solutions (saline and glucose solutions) and only two units of blood, their vascular system would only have literally water and they would ooze from vein puncture sites, since they would not have enough plasma to maintain osmotic pressure. He concluded that the oozing from vein puncture sites in the deceased's case may not

necessarily have been as a result of DIC but from a lowered osmotic pressure from the lack of blood, viz hypovolaemic shock.

87. Dr. Daisley accepted in cross examination that nine out of fourteen signs of AFE were present in the deceased's case, as a result he testified that the Defendant's conclusion that he was dealing with a case of AFE was a reasonable one.

88. Dr. Daisley surmised that the cause of peeling of the skin of the still born child was due to intrauterine death of the infant over a period of twenty-four hours or more. He explained that upon the death in utero the infant begins to decay and desquamination or skin peeling starts mere hours after intrauterine death.

Dr. Petronella Manning-Alleyne

89. Dr. Manning-Alleyne is a Paediatrician and her evidence was contained in her witness statement filed on the 15th February 2011.

90. Dr. Manning-Alleyne testified that she knew the deceased personally and had been the paediatrician for all of the deceased's children. Dr. Manning-Alleyne testified that the deceased usually had from PPH after her deliveries. It was Dr. Manning-Alleyne's evidence that because she had a history of PPH for her three previous pregnancies she was asked to donate blood prior to delivery in case of emergency during delivery. She testified that no blood was given for the fourth pregnancy.

91. Dr. Manning-Alleyne was present on the 2nd April 2003 when she started experiencing contractions. She advised that she go to the nursing home. The deceased was later discharged on the morning of the 3rd April 2003. Dr. Manning-Alleyne gave evidence that the deceased informed her that everything was fine with the baby.

92. Dr. Manning-Alleyne testified that on the 6th April 2011 she received a call from the deceased who told her that she had not felt the baby move. Dr. Manning-Alleyne instructed her to go to the nursing home. When Dr. Manning-Alleyne called the nursing home, she was informed by a nurse that there was no heart beat for the baby. She testified

that the Defendant informed the Claimant and the deceased that the baby was dead and the deceased was then prepared for vaginal delivery of the baby.

93. Dr. Manning-Alleyne gave evidence that she arrived at the nursing home shortly after 3:30 p.m. and when the Defendant arrived at around 4:40 p.m. she informed him that the deceased had a history of PPH. Dr. Manning-Alleyne's evidence was that the Defendant appeared to not have known this. Dr. Manning-Alleyne testified in cross examination that there was nothing in the "Admission Note" to the nursing home informing that the deceased had suffered from PPH previously. When the baby was delivered, Dr. Manning-Alleyne observed that it was macerated and opined that this meant it would have been dead for some time since a baby has to be dead for about three days before it is macerated.

94. It was Dr. Manning-Alleyne's testimony that as soon as the baby had been delivered, the deceased started bleeding profusely. During cross examination, Dr. Manning-Alleyne testified that according to the nurse's notes, the deceased went into shock approximately 5:15 p.m. It was the doctor's evidence that the Defendant and a nurse then began kneading the deceased's abdomen.

95. Dr. Manning-Alleyne testified that syntocinon was given but the nurse informed them that if more of the drug was needed there was no more to be given. At this point, Dr. Manning-Alleyne offered to obtain the drug at the Port-of-Spain Hospital. She obtained the drug, but testified that it was not used in the treatment of the deceased. In cross examination, Dr. Manning-Alleyne testified that this would have taken place approximately within the first hour after the delivery of the baby.

96. Dr. Manning-Alleyne gave evidence that up until three hours after delivery, no blood was taken from the deceased for cross matching and she only had one IV line. To her recollection, no blood products were given at this time. However, it was borne out of evidence on cross examination, that according to the nurse's notes, blood was taken for group and cross matching at about 6:40 p.m. By the court's estimation, this appears to be

approximately two hours after bleeding would have begun. This is based on the evidence that bleeding began immediately after the delivery of the still born child at 4:53 p.m.

97. At About 7:30 p.m. Dr. Manning-Alleyne said she asked the Defendant to give the deceased blood. She testified that no volume expanders were yet given. However in cross examination, Dr. Manning-Alleyne gave evidence that based on the nurse's notes (which she had a look at during cross examination) the deceased was in fact administered Ringer's Lactate, a volume expander) at 5:15 p.m. The Defendant then asked that Father Matthew D'Hereaux collect two units of blood from St. Clair Nursing Home. Dr. Manning-Alleyne accompanied Father Matthew D'Hereaux to collect the blood. Dr. Manning-Alleyne testified that before leaving for the blood, she noticed that the deceased was restless and "shocky" and opined that she was not going to survive.

98. Dr. Manning-Alleyne testified that she requested that Dr. Chang (anaesthetist) be called and when he arrived he instructed that the deceased be intubated, he started haemaccel and assisted with putting up a second IV line. However, the deceased's blood was not infusing.

99. Dr. Chang got the deceased's heart beat back up and advised that the deceased be taken to intensive care. Dr. Manning-Alleyne testified that they informed the family of this decision but when they returned to the room, the deceased started arresting and subsequently died at 10:10 p.m.

100. Dr. Manning-Alleyne gave evidence that when the Defendant was writing the death certificate for the deceased, she suggested to him that an autopsy be done, to which the Defendant declined. Dr. Manning-Alleyne then wrote the death certificate for the baby.

101. Dr. Manning-Alleyne testified that she did not advise the deceased's family to have an autopsy done although she was aware that a family could request one in a situation where it has not been ordered by the Coroner nor requested by the District Medical Officer

Ms. Margaret Rose D'Hereaux

102. Ms. D'Hereaux is the mother of the deceased and her evidence in chief was contained in her witness statement filed on the 15th February 2011.

103. It was Ms. D'Hereaux's evidence that she accompanied the deceased on her routine tests and visits to the First Defendant during her pregnancies. She testified that on the 2nd April 2003 the deceased began having contractions and Dr. Manning-Alleyne advised she be taken to the nursing home. Ms. D'Hereaux, the Claimant, Dr. Manning-Alleyne and the deceased then went to the nursing home where the deceased was kept overnight. Ms. D'Hereaux testified that the deceased was released the next day (3rd April 2011) and she attended her pre-arranged appointment for an ultrasound and doctor's visit. The Defendant performed the ultrasound and at that point the baby was in position for delivery.

104. Ms. D'Hereaux testified that the First Defendant then informed her and the deceased that she was leaving the country on the 5th April and that the Defendant would deliver the baby.

105. Ms. D'Hereaux gave evidence that on the 4th April 2011 the deceased complained that she was not feeling the baby moving. On the 6th April Ms. D'Hereaux took the deceased to the nursing home about 7:30 a.m. At around 11:30 a.m. the Defendant came to the nursing home and they were informed that the baby was dead. The Defendant then asked that the drip be increased and informed them that labour would begin within three to four hours. Ms. D'Hereaux testified that the Defendant then left. At around 2:00 p.m. the deceased was taken into the delivery room.

106. Ms. D'Hereaux testified that as the evening grew later, Dr. Manning-Alleyne and Father Matthew left to go to St. Clair Medical Centre for blood. The Claimant then came out of the delivery room and said that the deceased was not responding to him. During cross examination Ms. D'Hereaux approximated that this would have been around 6:00 p.m. or 7:00 p.m.

107. Around 9:30 p.m. the Defendant and Dr. Manning-Alleyne and Dr. Chang came out of the delivery room and spoke to the deceased's family. The Defendant informed them that the deceased's condition was deteriorating and that she needed to be put on a respirator. He advised that she be taken to St. Clair Medical but a down payment of $25,000.00. was needed. Ms. D'Hereaux testified that at that point Dr. Chang explained that when he arrived in the delivery room it was in time to see a flat line on the monitor and that the deceased had a low pulse. Thereafter, a nurse came into the meeting and called the doctors back into the delivery room. It was the testimony of Ms. D'Hereaux that the deceased died shortly after 10:00 p.m.

108. Ms. D'Hereaux testified that the First Defendant knew that the deceased had a history of PPH after delivery. She testified that the deceased had been given vitamin K injections with her previous pregnancies, but that this was not done with this pregnancy. Ms. D'Hereaux testified that the Defendant delivered her third child and with that delivery she was given vitamin K.

109. Ms. D'Hereaux gave evidence that although the deceased was a gestational diabetic, she monitored her blood sugar level daily and was in good health according to her doctor.

110. Ms. D'Hereaux testified that about a month after the death of her daughter, she and the Claimant visited the Defendant at his office where he told them that it was AFE which caused her daughter's death. Ms. D'Hereaux testified that she pointed out to the Defendant at that point that the Death Certificate read "Post Partum Haemorrhage" and DIC. At this meeting, it was the evidence of Ms. D'Hereaux that the Defendant told them that he had had is fair share of problems in practice and that about seven similar cases like the deceased of which five resulted in death.

Dr. Waveney Charles

111. Dr. Charles's expert report was filed on the 30th June 2011. Dr. Charles is a Haematologist. His expert report was admitted into evidence by consent and there was no cross examination.

112. He was asked to provide his expert opinion on the following questions:

i. Are products available for stopping excessive bleeding in cases where there is post partum haemorrhaging?

ii. And if so, was there a system in place for accessing those products in the year 2003?

iii. Is there any assistance a laboratory can give with respect to a determination of the extent of the haemorrhage?

iv. Would such information guide the response?

v. Why would someone want to prepare for autologous transfusions?

113. In response Dr. Charles opined:

i. Yes, (Blood) products are available for use in aiding the cessation of haemorrhage in a post partum situation. The success of their usage depends upon the underlying cause of the haemorrhage.

ii. A system was in place in 2003 at the Central Laboratories of the NBTS 160 Charlotte Street for the procurement of blood products should the need arise.

iii. Depending upon the nature of the requests made, the severity of the haemorrhage may be estimated in relation to the time of withdrawal of the sample of blood.

iv. This is a dynamic situation so that a laboratory is able only to estimate blood loss based on the derangement of results assuming serial test were done on samples.

v. Autologous transfusions are indicated when a procedure or situation frequently requiring the use of blood is undertaken.

The Evidence on behalf of the Defendant

114. The evidence on behalf of the Defendant was given by the Defendant and two other witnesses, namely (1) Dr. Raule Jibodh, and (2) Dr. Hemant Persad.

The Defendant

115. The Defendant's evidence in chief was contained in his witness statement filed on the 15th February 2011. He is a specialist Obstetrician and Gynaecologist. His qualifications are: Bachelor of Science degree (Hons) in Genetics from Mc Gill University (1971), Medical Degree from Mc Gill University (MDCM 1975), and a Fellow of the Royal College of Surgeons (Canada) specialising in Obstetrics and Gynaecology since 1981.

116. The Defendant gave evidence that he had delivered one of the deceased's three previous children and that delivery was uneventful. He denied that the deceased was a known bleeder as she was neither a haemophiliac nor suffering from von willebrand disease.

117. It was the Defendant's evidence that he had performed ultrasounds on the deceased with the final one being on the 3rd April 2003. This last ultrasound resulted in the Defendant finding that the baby was Cephalic (downward facing), macrosomic (the baby had developed a significant amount of subcutaneous fat) and had a normal heart rate of 147 beats per minute. The placenta was large and healthy and the amniotic fluid

normal. The deceased was thirty-six and a half weeks pregnant at the time. A report of this ultrasound was prepared and is dated the 3rd April 2003 and is annexed to the Defendant's witness statement.

118. It was agreed that the Defendant would cover for the First Defendant, the doctor of the deceased while she was out of the country.

119. The events of the 6th April 2003 according to the Defendant were as follows:

i. At about 9:00 a.m. he was informed by the First Defendant that the deceased's baby was now still born. He visited the patient at 11:00 a.m. and confirmed that the baby had no heart beat. Labour was then induced and he considered it safe to leave as the labour process sometimes takes hours. He left, and instructed the nurses to call him when the deceased was close to full dilation.

ii. At 4:30 p.m. he was paged and he arrived about 10 minutes after. The deceased was already in the delivery room and Dr. Manning-Alleyne and the Claimant were there.

iii. While delivery was ongoing, the deceased was administered Syntocinon. Delivery occurred at 4:53 p.m. and almost immediately after there was significant per vagina bleeding which he estimated to be about 500 cc. The blood was pale pink and watery and was not clotting this was an indication to him of possible intravascular coagulopathy. The placenta was delivered immediately after delivery of the baby and was complete and spontaneous.

iv. During delivery there was a small posterior fourchette laceration which he took about 3 minutes to repair.

v. An additional dose of 10 units of Syntocinon was again given. At 5:00 p.m. 20 units of Syntocinon were added to 300 ml of IV infusion. At 5:15 p.m. another litre of fluid, ringers lactate and another 20 units of

Syntocinon were given. The reason ringers lactate was added was to expand the intravascular volume of the patient.

vi. At 5:15 p.m. the deceased had lost less than an additional 300 cc of blood and her blood pressure fell to 41/32 which indicated she was in shock. She was diagnosed as having an amniotic fluid embolus. At this time she was given her first unit of blood substitute, haemaccel. A Foley catheter was inserted into the bladder which gave evidence of blood stained urine. This gave a further indication that there may have been some sort of coagulopathy problem.

vii. At 6:15 p.m. the deceased's blood pressure was recorded as 103/67 and her pulse was 90 bpm.

viii. The first unit of blood was started at 7:36 p.m. which he obtained from St. Clair Medical. Between 5:15 p.m. and 9:45 p.m. two units of blood were given and seven units of haemaccel were given.

ix. At 6:40 the deceased was cold and clammy, her blood pressure was 35/22. At 7 p.m. her blood pressure was 60/30. At 7:36 p.m. CPR was commenced. At around this time the deceased was being administered oxygen.

x. At 7:36 p.m., 7:55 p.m. and 9:36 p.m. the deceased was given adrenaline.

xi. Dr. Chang was called in at 7:30 p.m. and arrived at 7:50 p.m. He immediately intubated the deceased.

xii. At 8:00 p.m., 8:25 p.m., and 9:45 p.m. the deceased was defibrillated because she was went into cardiac arrest.

xiii. The deceased was pronounced dead at 10:10 p.m.

120. The nurses' notes and the Defendant's notes of the deceased's treatment were contained in the Agreed Bundle of Documents.

121. The Defendant testified that during delivery the expected average volume of blood loss was 200 to 300 cc. The definition of PPH is loss of 500 cc or more. The deceased lost approximately 800 cc.

122. The Defendant explained that 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. The reaction takes the form of acute respiratory distress, acute cardiovascular collapse and a coagulation defect. The Defendant diagnosed the deceased as having suffered and AFE and testified that the deceased presented no symptoms prior to delivery that an amniotic fluid embolus may have occurred.

123. The Defendant further testified that the occurrence of AFE cannot be prevented. He gave evidence that he had five such cases, with just one resulting in mortality.

124. The Defendant gave evidence that to control PPH one would use oxytocin, massage the uterine fundus, ensure there are no vaginal lacerations actively bleeding and replace blood loss and give a volume expander. All of these, according to the Defendant, were done. He explained in cross examination that he continued the uterine fundal massage for the length of time he did so as to ensure that he left no stone unturned in arresting the potential or potentially more bleeding in the patient.

125. Although the Defendant accepted that the length of time between the delivery and the first administration of blood was long, he explained that there was no blood available at the nursing home and blood had to be requested.

126. The Defendant testified that even if two units of blood was given somewhere between delivery and 5:15, it would not have made a difference in the deceased's survival. The Defendant explained that the turn of events, from delivery to bleeding, was sudden and catastrophic. He stated that he knew even before the deceased went into shock what the outcome would have been, having observed the pale-pink, not clotting blood.

127. The Defendant testified that he was aware that the deceased was a gestational diabetic but explained that this does not affect bleeding. He testified in cross examination that before the deceased admission to the nursing home he did not ask for her record because he knew when a patient is admitted there is usually an admission note from the attending physician. He also testified that he did not ask for the admission note prior to the 6th April 2003 because the First Defendant had given him the antenatal history for the patient. The court pauses to note here that in any event, there is no evidence that the patient history recorded that she was a known bleeder.

128. The Defendant's testimony in cross examination was that although a laceration during delivery is expected, it is not anticipated that this would mean that blood would be needed. He explained that the fact that the baby was viewed as "fat" or had macrosomic features did not necessitate a Caesarean Section be performed for delivery. The Defendant further explained that in this case a Caesarean section was not necessary because the deceased had delivered three previous babies and with still birth vaginal delivery is preferred.

129. The primary cause of death was stated by the Defendant as being disseminated intravascular coagulopathy (DIC). One of the conditions where DIC can occur is AFE. The secondary cause of death was PPH.

130. The Defendant testified that he requested that an autopsy be done but the Claimant refused. Nevertheless, the Defendant explained in cross examination that the diagnosis of AFE is a clinical assessment and an autopsy would not necessarily determine it but substantiate the finding. Despite his finding of AFE, this did not appear on the deceased's death certificate. He explained that AFE was his presumptive diagnosis and he instead wrote objective findings as cause of death, he testified that he could not write something that was presumptive as a cause of death.

Dr. Raule Jibodh

131. Dr. Jibodh's expert report was filed on the 29th July 2011. He is an Obstetrician and Gynaecologist. His qualifications are: BSc at McGill University (1968), MBBS at UWI (1973), Fellowship of the Royal College of Surgeon of Canada and CSPQ (1978). He has two publications in the field of Obstetrics and Gynaecology, one in the American Journal of Obstetrics and Gynaecology and the other in the Caribbean Medical Journal. He has been in continuous practice in the field of Obstetrics and Gynaecology for about 33 years.

132. Dr. Jibodh was asked to give his expert opinion on the following:

i. Whether there was anything in the deceased patient's medical history as contained in the agreed bundle of documents filed on the 12th July 2010 which indicated that the deceased was a 'bleeder';

ii. Was Dr. Achong Low's diagnosis that the deceased suffered amniotic fluid embolism a valid diagnosis and if so kindly comment on the treatment he administered to the deceased in light of that diagnosis;

iii. Whether the patient died as a result of the effects of amniotic fluid embolism; and

iv. Was the care delivered by Dr. Achong Low to the deceased as evidenced in his witness statement, filed on the 15th February 2011, and the notes contained in the agreed bundle of documents, in accordance with the practice accepted as proper by the body of medical practitioners skilled in the field of Gynaecology and Obstetrics.

133. On his consideration of the nurses' notes, the Defendant's notes and the Defendant's witness statement, Dr. Jibodh opined that there was no mention of the deceased having had PPH or being a bleeder.

134. Dr. Jibodh believed that the appearance of non-clotting blood that occurred at delivery suggested clinically that a coagulation disorder was occurring. He stated that the deceased was appropriately given IV Syntocinon and fundal uterine massage in an attempt to stop the bleeding since her uterus was atonic.

135. Dr. Jibodh was of the view that the deceased should have been infused blood and blood products, platelets and cryoprecipitate if available. Surgical management of the condition would have included hypogastric artery litigation, hysterectomy, or uterine artery embolisation but would have been risky in the presence of a coagulopathy in an unstable patient. Dr. Jibodh testified that it was not clear from the notes whether the deceased was given blood products, platelets or cryoprecipition. He opined that had blood, fresh frozen plazma, platelets and cryoprecipitate been available and given the coagulation process might have been reversed and rendered surgical intervention unnecessary.

136. It was Dr. Jibodh's opinion that although the Defendant administered oxytocin, crystalloids, blood and haemaccel, he needed to administer more blood and blood products. In cross examination. Dr. Jibodh stated that he was not aware if these were available to the Defendant at the time but acknowledged that there is a difficulty in obtaining these in an emergency situation. During cross examination, Dr. Jibodh testified that if after four hours of rubbing the patient's abdomen and administering oxytocin and the bleeding does not stop he would call someone senior to him and if the patient is stable enough try to get the patient transferred to a place where someone can help further in the management of the case. Dr. Jibodh was of the view that the deceased was unstable and could not be safely transferred to an ICU. He stated that there were no laboratory facilities at the nursing home at the time and vaginal delivery was a correct choice rather than Caesarean Section.

137. Dr. Jibodh opined that the deceased experienced consumption coagulopathy, haemorrhage, drastic fall in BP and cardiac arrest which led to her demise and this was consistent with a diagnosis of AFE. This diagnosis, he explained was generally made by identifying clinically characteristic signs and symptoms although there is great individual

variation in its clinical manifestation. The syndrome, according to Dr. Jibodh was an absolute uncommon occurrence but common cause of maternal death. He explained in cross examination that AFE occurs seven per hundred thousand deliveries worldwide. It is considered unpredictable and unpreventable. Dr. Jibodh was of the view that in such a rare unpredictable event, one would not be expected to have blood available in the nursing home prior to delivery. In his twenty years of practice in Trinidad and Tobago in the field, Dr. Jibodh testified in cross examination that he has only encountered one such case. He found that one practitioner experiencing five such cases was unusual.

138. Dr. Jibodh opined that the diagnosis was reasonable on the basis of the abrupt onset of hypotension, cardio respiratory failure and DIC.

139. Dr. Jibodh concluded that in view of the emergency that arose at the delivery and resources available at the time, the Defendant acted in the best interest of the patient who unfortunately demised despite his best efforts. He testified in cross examination that in this particular instance with the patient in this condition he would not have considered going into the uterus and removing it to stop the bleeding. He explained that in such a situation it would be dangerous to perform surgery on the patient, there is no facility to perform that surgery, there is no ICU and the patient is unstable therefore the Dr. Jibodh reasoned that he would have to work with what he has in the situation. He testified that he would continue giving oxygen, give blood and call for help.

Dr. Hemant Persad

140. Dr. Persad's expert report was filed on the 30th June 2011. Although the letter of instruction requesting the report asked specifically for the doctor's opinion in relation to the First Defendant, the report is material in relation to the case against the Defendant and he was cross examined in relation to the Defendant's case.

141. Dr. Persad's evaluation was made based on his perusal of notes relating to the deceased's prenatal care for the fourth pregnancy and copies of the delivery notes of her three previous pregnancies.

142. Dr. Persad listed his qualifications as having: graduated from UWI in 1980, obtained the MRCOG (postgraduate specialist qualification) in 1986, become a Fellow of the College of Obstetricians and Gynaecologists in 1998.

143. The questions material to the case against the Defendant which were asked of Dr. Persad are:

i. Whether it is standard practice in Trinidad and Tobago to have blood on hand for deliveries.

ii. Whether it is standard practice in Trinidad and Tobago for ultrasound scans to be performed by obstetric gynaecology practitioners rather than registered ultrasound qualified persons.

iii. Whether the deceased was a "known bleeder" with a history of post-partum bleeding.

144. Dr. Persad opined that it was not standard practice in Trinidad and Tobago or the UK to have blood on hand for deliveries. He quoted that "neither a blood group and save (serum to be cross matched) nor cross-matched sample should be taken from healthy women with an uncomplicated history who are due to have a Caesarean Section. It should be noted that blood loss for Caesarean Section is often more that a vaginal delivery" (**RCOG Green-top Guideline for current Obstetric practice in the UK, 2008 Edn, pg 427**).

145. It was Dr. Persad's opinion that in-patients deemed high risk for significant haemorrhage a sample of blood is taken and sent to the blood bank to either (a) save the serum or (b) cross-match the blood available. He emphasised on cross examination that it was only in cases where it is anticipated that there would be serious haemorrhaging would blood be sourced before-hand in preparation for delivery. Although he testified

that there are cases where you cannot anticipate haemorrhaging, he explained that it is not cost effective to have blood available in the event that haemorrhage would occur. Dr. Persad explained that in the case of saving the serum, this is only valid for two days after which another sample must be sent. In the case of cross-matching blood, this is not kept for a specific patient and may be available to other patients. The blood is stored at the blood bank and only released to the requesting institution when it is needed for immediate use. Unused blood cannot be returned and must be discarded. Dr. Persad opined that in Trinidad and Tobago, there is a significant shortage of blood and blood products and products like platelets or cryoprecipitate are very difficult to procure and almost never in a timely fashion.

146. Dr. Persad explained that ultrasound scans may be done at three levels and Obstetricians are competent to perform all levels of scans. He further explained that in public institutions all obstetric scans are done by trained technicians who usually possess a Diploma in ultrasound. In the private setting most obstetric scans are done by a technician and the remainder, by either a Radiologist or Obstetrician. This, he opined, was the standard practice in Trinidad and Tobago and the UK.

147. Dr. Persad concluded that the deceased was not a known bleeder with a history of PPH as her previous three pregnancies and deliveries, all done at Stanley's nursing home, show no evidence to substantiate this assertion. Dr. Persad surmised that not only had she never received any blood transfusions or blood products in her previous three pregnancies, but she was not put on specific haematinics post delivery.

148. Dr. Persad opined that gestational diabetes is managed as high risk, with increased likelihood of both maternal and foetal complications. Serial ultrasounds, in Dr. Persad's opinion, are important in assessing foetal well-being and form the best method of biophysical foetal assessment. The nature of the risk, it was explained in cross examination by Dr. Persad, was that the foetus could die. The risk to the mother is that she could be at risk for infection if her diabetic status is not controlled. Additionally, the delivery may be more difficult and traumatic for the mother as the baby is usually larger than normal.

149. Dr. Persad testified in cross examination that natural delivery two weeks before the expected date is usually done in the case of a gestational diabetic. He explained that the risk of a large baby might mean that the placenta is also large so there is a larger area at delivery from which the mother would bleed. He however, testified that the mother is not more prone to a ruptured uterus than a woman who has had babies before.

150. Dr. Persad gave evidence that where a gestational diabetic goes to the hospital for the birth of her child blood samples would be taken either some time on admission or shortly after. This he said was done to know what the patient's blood sugar status is and to know her blood count but not in anticipation of post delivery bleeding. It was the doctor's evidence that a gestational diabetic is not more at risk for bleeding. He testified that provision to have blood on hand is only made where bleeding is anticipated, gestational diabetes not being one of those situations, does not require blood to be on hand prior to delivery.

151. Dr. Persad explained in cross examination that situations where bleeding is anticipated included where the patient had a history of PPH requiring blood transfusion, a history of fibroids (since the uterus in that situation does not contract properly after childbirth) and people with known bleeding disorders. Dr. Persad testified that the level of preparation depended on the risk.

152. On the use of Syntocinon, Dr. Persad testified in cross examination that it can be used before, during and after labour. The drug is used before labour to initiate contractions, during to augment labour and after to assist with the delivery of the placenta and thereby reducing blood loss at this stage. Before and during labour the drug is given as an infusion with a fluid and is given continuously. The doctor stated that the dose he normally uses is 5 units of Syntocinon to 1 litre of fluid. After labour it is given as an injection on its own is usually 10 units of the drug intravenously or 20 units infused with fluid. If there is significant bleeding after delivery the dose that can be given of Syntocinon ranges from 20 units to 80 units in an infusion. What is important, according to the doctor, is arresting the bleeding as quickly as possible. He explained that if too high a dose is given during labour there is the possibility that the uterus can rupture but

once the foetus has been expelled there is no possibility of the uterus rupturing so a higher dose of the drug can be given. Dr. Persad testified that from the notes he perused there was no sign of a ruptured uterus during labour in the deceased's case.

153. AFE, according to Dr. Persad, is different to PPH, in that PPH is a condition which may be caused by AFE that is the haemorrhaging is an occurrence that may be as a result of the AFE. The symptoms of shock may present before the haemorrhaging begins or on the onset of haemorrhaging. When a diagnosis of PPH is made the cause must be determined. A clinical assessment of the symptoms is made. Thus Dr. Persad testified that it wasn't possible to mistake PPH for AFE as AFE may be the actual cause assessed for the occurrence of the PPH.

Submissions

154. Written closing submissions on behalf of the Defendant were filed on the 26th January 2012. Amended closing submissions were filed by the Defendant on the 30th January 2012.

155. The Claimant then filed written closing submissions on the 26th March 2012.

Findings of Fact

156. This case in large measure hinges on the court's factual findings as the legal principles for medical negligence in the cases set out below are not in dispute. Whether the Defendant acted in breach of his duty of care as a Gynaecologist/Obstetrician in the treatment of the deceased is a question that must be decided on an evaluation of the evidence before the court.

Cause of Death

157. This issue of fact is pivotal in considering whether the treatment of the deceased by the Defendant was reasonable and up to standard in the circumstances of her death. The question that arises is thus, did the deceased exercise reasonable care, skill and diligence in the treatment of the deceased in light of the diagnosis of cause of death.

158. In this regard, the Defendant testified that he diagnosed the deceased as having an amniotic fluid embolus. He had explained that this occurs during labour when amniotic fluid gets squeezed into the vessels of the uterus which then goes into the lungs and creates a reaction in the patient. This reaction manifests in a combination of acute reparatory distress, acute cardiovascular collapse and a coagulation defect. It is not disputed that these symptoms presented itself in the deceased's case. What is in dispute is whether these symptoms meant that what was present was AFE or PPH caused by a condition other than AFE.

159. It is noteworthy that although the Defendant testified that the deceased had suffered from AFE and he treated her for such, the cause of death which he certified was stated as "Disseminated Intravascular Coagulopathy, Still Birth and Post Partum Haemorrhaging. There was no mention of AFE in either the Registration of Death Form or the Death Certificate.

160. The evidence of Dr. Daisley is essential on this issue. Dr. Daisley has been a pathologist since 1985 and has performed in excess of 30,000 autopsies. It is clear to the court that in the ordinary course of events, the pathologist with many years of experience such as this witness is uniquely qualified to make findings as to causes of death. The unchallenged experience of Dr. Daisley appears to the court to be deserving of considerable weight in assessing the facts of this case. The court therefore reasons that Dr. Daisley stands on firm ground in analysing the possible cause of death of the deceased and his experience is to be preferred in this regard.

161. Dr. Daisley's evidence was that it was more likely than not that the deceased died of hypovolaemic shock following PPH. He opined that the cause of the PPH in the deceased case could have been uterine atony. He also believed that there could have been several other causes for the DIC suffered by the deceased other than AFE. He opined that DIC could have been a cause of PPH but was of the view that laboratory test ought to have been performed by the Defendant to confirm this. Dr. Daisley however listed AFE as a general possible cause of PPH. He emphasised that an autopsy ought to have been performed to confirm the precise cause of death.

162. Despite the fact that the Defendant made the finding of DIC, Dr. Daisley reasoned that no attempt to treat it was made by the Defendant. Treatment, he explained, would have included the administration of platelets, fresh frozen plasma, whole blood, heparin and clotting factors. Although whole blood was given, Dr. Daisley was of the view that the administration of two units of blood and isotonic solutions could not reverse DIC. Although Dr. Daisley admitted in cross examination that one of the possible side effects of heparin was aggravated bleeding he maintained that it could be used to treat DIC. Notwithstanding this, Dr. Daisley accepted in cross examination that the Defendant's conclusion that he was dealing with a case of AFE was a reasonable one.

163. In the evidence of Dr. Persad, he explained that PPH is a condition which may be caused by AFE. That is, the haemorrhaging is an occurrence that may be as a result of the AFE. Thus, Dr. Persad was of the view that it was not possible to mistake PPH for AFE as AFE may be the actual cause attributed to the occurrence of the PPH. What is important in a case of haemorrhaging is determining the cause of the bleeding by clinical assessment so that proper management can be carried out.

164. The issue thus is whether the Defendant's testimony and /or case of the finding of AFE is to be accepted, or whether the court should accept Dr. Daisley's estimation that what occurred was a case of PPH caused by uterine atony and DIC.

165. The entry in the Death Certificate and the Registration of Death Form of the cause of death as "Disseminated Intravascular Coagulopathy, Still Birth and PPH" is of little assistance. A certificate of the Registrar General of a death proves the fact, place and date of death, the sex, age and occupation of the dead person, but is not admissible as evidence of the cause of death: see ***Halsbury's Laws of England 5th Edn. Volume 11 (2009) para 907***; ***Bird v Keep [1918] 2 KB 692, CA***; ***Re Stollery, Weir v Treasury Solicitor [1926] Ch 284, CA***; ***Jhunia Ramjattan (also called Jhunia Ramjattan Baldan) v Kalal Ramjattan HCA 574 of 1981 (High Court Trinidad and Tobago)***; ***Births and Deaths Registration Act Chap 44:01 s. 47(2)***.

166. The death certificate is therefore not evidence of the cause of death in the present case. The finding of the cause of death would therefore depend on the preferred viva voce evidence. In this scenario, the evidence of a Pathologist, in the court's view carries a greater weight than that of a Gynaecologist/Obstetrician, not only because of the fact of Dr. Daisley's specialty but also because he has been active in this field since 1985 and has performed over 30,000 autopsies. It is his experience in scientifically analysing the evidence presented by the body of the deceased which distinguishes the pathologist from the specialist practitioner. This is a determining factor. The court therefore accepts the evidence of Dr. Daisley that an autopsy ought to have been performed so as to confirm the cause of death. The court notes that although it was accepted by Dr. Daisley in cross examination that the theory of AFE presented by the Defendant was a reasonable one, there is no evidence to suggest that that any other possible cause as outlined by the witnesses was unreasonable.

167. Additionally, this court is concerned by what appears to be a previous inconsistent statement made by the Defendant in the Registration of Death Form and by extension in the Death certificate, that is, that the cause of death was PPH, still birth and DIC. It appears to the court that there has been no reasonable basis put forward by the Defendant to explain why he would have given a different cause of death then. In other words, if AFE could reasonably be cited as the cause of death in these proceedings, then it ought

equally to have been evident to the Defendant that AFE was the cause of death when certifying death at that time. The Defendant explained in cross examination that he did not certify AFE as the diagnosis because it was his presumptive diagnosis and in writing the cause of death he wrote was open and objective. The court has therefore had to consider whether having said on a previous occasion that death was due to PPH and DIC, the Defendant is now attempting to change his assessment of the cause of death in a convenient effort to assist his case to PPH and AFE.

168. The court has had regard to the totality of the evidence including but not limited to the considerable weight attached to the evidence of Dr. Daisley by the court, and the inconsistency in the finding of the Defendant. However the court also notes the evidence of Dr. Daisley that an autopsy ought to have been performed to determine with finality the cause of death. Notwithstanding this, the court observes that it was accepted by all that the deceased suffered from PPH, whether this was due to AFE (as the Defendant is now seeking to establish in evidence) or to DIC as appears in the death certificate is a determination the court is not prepared to make. The evidence presented to the court does not establish either cause on a balance of probabilities. In so finding the court is also aware that it is not bound to accept the evidence of any single expert even one of considerable experience. The court therefore accepts the diagnosis of PPH as the cause of death and makes no determination of the possible cause of PPH.

Gestational Diabetes

169. The Claimant claimed that the Defendant ought to have known that the deceased was a gestational diabetic. It was not denied by the Defendant that the deceased was a gestational diabetic.

170. The tenor of the cross examination of Dr. Persad, by Counsel for the Claimant, on the issue of the deceased's gestational diabetes suggested that Counsel was seeking to make a causal link between gestational diabetes and bleeding. In fact, when asked about

the risk to a gestational diabetic, Dr. Persad testified that the mother was at risk for infection if her diabetic status was not controlled and that the delivery may be more difficult and traumatic for the mother as the baby is usually larger than normal. Dr. Persad however iterated that a gestational diabetic is not more at risk for bleeding.

171. The evidence was that it was only in cases where it is anticipated that there would be serious haemorrhaging would blood be sourced before-hand in preparation for delivery. Counsel for the Claimant attempted to establish that the deceased was known to be a gestational diabetic before delivery and therefore was at risk of haemorrhaging post delivery and consequently, blood ought to have been on-hand.

172. Other than Counsel for the Claimant's questioning on this issue of gestational diabetic, no evidence was led to suggest that there was in fact a link between gestational diabetes and an anticipation of bleeding of this deceased after delivery.

173. The court therefore also finds that there was no casual link between the deceased being a gestational diabetic and the risk of haemorrhaging post delivery.

Known Bleeder

174. The Claimant has claimed that the deceased was a known bleeder. Dr. Manning-Alleyne has supported this contention and testified that the deceased suffered from PPH subsequent to her three previous deliveries.

175. The Defendant has denied that the deceased was a known bleeder and submitted the following:

> That the deceased was not a "known bleeder" and therefore, there was nothing for the Defendant to heed with respect to same. Further, there was no evidence that the Defendant did not have regard for the medical record of the deceased.

"Failed to do or to have done any blood investigations"

That there is no evidence to suggest that the Defendant should have done any blood investigations with respect to the deceased prior to her delivery and therefore he cannot be held negligent for his failure so to do. Additionally, the evidence is that prior to 4th April 2003 blood tests were performed on the deceased and post delivery, the Defendant did have blood drawn from the deceased and sent for testing and cross matching at 6:40 p.m. on April 6, 2003.

"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 (sic) as the deceased was a "known bleeder"

The compelling evidence is that the deceased was not a known bleeder and if she was not a known bleeder then the clear evidence from the three Gynaecologists Obstetricians is that it would not be unusual to not have blood on hand at the delivery. Also, the Defendant was able to obtain and apply to the deceased, two units of blood. The question may then be, whether this was a sufficient amount. The evidence is that in addition to the 2 whole units of blood, the Defendant also gave the deceased volume expanders and substitutes, including, ringers lactate, Haemaccel and Normal Saline, and it is submitted that in the circumstances, the treatment of the deceased by the Defendant was not negligent.

176. The court must consider whether the evidence supports the contention that the deceased was a known bleeder. If it is so found, whether the Defendant was negligent by:

i. *Failing 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;*
ii. *Failing to do or to have done any blood investigations; or*

iii. *Failing 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;*

177. The evidence of Dr. Bhola, Dr. Jibodh and Dr. Persad was that there was nothing in the medical records suggesting that the deceased was a known bleeder. In fact, Dr. Manning-Alleyne testified that when the Defendant arrived in the delivery room she informed him that the deceased had previously suffered from PPH and that the Defendant seemed to have not known.

178. The Defendant testified that he delivered the deceased third baby and that that delivery was uneventful. He testified that on that occasion the deceased had not suffered from PPH.

179. It was Dr. Manning-Alleyne's evidence that the deceased had previously suffered from PPH on her third delivery. The court notes Dr. Manning-Alleyne's evidence in cross examination that her role in the delivery room is limited to the treatment of the baby and that when the baby is delivered she usually exits the delivery room with the baby. The court therefore considers that Dr. Manning-Alleyne's evidence on the *occurrence of PPH* post delivery subsequent to the previous delivery in the face of there being no record of same and her modus operandi upon delivery is not reliable and will attach no weight to it. This does not mean that the court has rejected the evidence of Dr. Manning–Alleyne that she did in fact represent to the Defendant that the deceased had suffered from PPH at her prior delivery in manner in which she testified and this issue shall be dealt with later.

180. The court therefore prefers the evidence of Dr. Bhola, Dr. Jibodh and Dr. Persad on the issue and finds that on a balance of probabilities the deceased was ***not a known bleeder.***

Particulars of Negligence

181. The Defendant contended that the Claimant must be confined to that which he pleaded in his Statement of Claim (see ***Charmaine Bernard v Ramesh Seebalack [2010] UKPC 15)***. It was submitted that the Claimant's case against the Defendant was that the deceased was a "gestational diabetic" and a "known bleeder" and furthermore, that the Defendant's treatment of her having regard to these identified factors was negligent.

182. The Defendant submitted that the Claimant's particulars of negligence ought to be linked to paragraph 10 of the Statement of Claim which referred to the deceased being a "gestational diabetic" and "known bleeder". It was therefore submitted that each particular of negligence must flow from the averment of knowledge of the deceased suffering from "gestational diabetes" and being a "known bleeder".

183. By way of example, the court understands this to mean, that where in particular of negligence (6) the Claimant alleges the failure of the Defendant to "exercise due care and diligence in the treatment of the deceased in all circumstances of the case", the Defendant is saying that the Claimant is limited by his pleadings to proving that the Defendant was negligent in failing to exercise due care and diligence in the treatment of the deceased in light of the knowledge that the deceased was a "gestational diabetic" and "known bleeder". So that if the defendant is found to have not known that the deceased was a bleeder or gestational diabetic, the Claimant's claim of negligence must fail.

184. The Claimant contended that each of the averments stated at paragraph 10 (2), (3), (4) and (5) of the Statement of Claim, individually and independently, if proved, constituted individual instances of negligence. Knowledge that the deceased was a gestational diabetic or known bleeder was not a necessary element of the tort of negligence in the instant case. It was submitted that such knowledge would be an aggravating but dispensable factor.

185. The court considers that each particular stands on its own in alleging the way in which the Defendant was negligent. The facts to be set out must be those which show a duty to take care and the particulars must equally demonstrate the specifics as to the manner in which that duty has been breached. In order to give such full effect to the assessment of the claim as set out in the pleading, the Statement of Claim must be read as a whole. It would be an exercise in obfuscation should the particulars be read in isolation. Further, the Statement of Claim sets out the brief facts on which the Claimant intends to rely so as to afford the Defendant the opportunity to understand and answer the case. No more is required of the Claimant. The Statement of Claim must be specific to the extent that the Defendant knows what he must answer but need not contain every detail. The need for extensive pleadings including particulars should be reduced by the requirement that witness statements are now exchanged: **McPhilemy** ***v Times Newspapers Ltd [1999] 3 All ER 775; Charmaine Bernard v Ramesh Seebalack (supra)***.

186. Consequently, the court cannot accept the Defendant's submission that the Claimant's particulars of negligence ought to be linked to paragraph 10 of the Statement of Claim and that each particular of negligence must flow from the averment of knowledge of the deceased suffering from "gestational diabetes" and being a "known bleeder".

Medical Negligence

187. The law on medical negligence is settled. The medical practitioner is not expected to achieve success in every case. The duty of a medical practitioner is to exercise reasonable skill and care of a man exercising that particular art. He will not be negligent if he has acted in accordance with a practice accepted as proper by a responsible body of medical men skilled in that particular art: (***Dr. Patricia Deonarine v Rana Ramlal Civil Appeal No.28 of 2003, South West Regional Health Authority v Samdaye Harrilal CV***

App 60 of 2008, <u>Bolam</u> v <u>Friern Hospital Management Committee</u> [1957] 2 All E R 118).

188. Consequently, the court must consider, in light of the finding above on the cause of death, whether the Defendant acted in accordance with the practice accepted as proper by a responsible body of medical men skilled in the field of Gynaecology/Obstetrics.

189. In this regard, the court must consider the evidence of Dr. Bhola, Dr. Jibodh and Dr. Persad on the accepted practice for PPH. It is noted that Dr. Persad's evidence in chief did not relate to the management of the deceased in the circumstances surrounding the instant case. His cross examination was however relevant to the issues presented. Additionally, the evidence of Dr. Jibodh was that the diagnosis of AFE was reasonable and his evidence related to what was accepted based on the diagnosis of AFE.

190. Further, in assessing the evidence the court is cognizant of the disparity in experience between Dr. Bhola and all the other practitioners who have given evidence. This is a factor that the court has considered in the round when looking at the evidence in its totality. It does not mean however that the court has automatically given less weight to the evidence of Dr. Bhola because of her relative experience. In the court's view, the disparity as to years of experience may be less of a factor when it comes to matters of ***practice*** accepted as proper by a responsible body of medical men skilled in that particular art.

191. Despite Dr. Jibodh's acceptance of the diagnosis of AFE, he was of the view that the deceased should have been infused blood and blood products, platelets and cryoprecipitate if available. He opined that surgical management of the condition would have included hypogastric artery litigation, hysterectomy, or uterine artery embolisation but would have been risky in the presence of a coagulopathy in an unstable patient. It was Dr. Jibodh's opinion that although the Defendant administered oxytocin, crystalloids,

blood and haemaccel, he needed to administer more blood and blood products. Dr. Jibodh also testified that he would have called for help.

192. Dr. Bhola advised that in an emergency, where PPH is identified, management would involve calling extra personnel, blood banks regarding availability of blood and blood products, anaesthetist in case surgical intervention is necessary; evaluation and resuscitation e.g. the use of the ABC method and taking of blood for full blood count, coagulation screening, urea and electolytes and cross matching; monitoring and investigation of the patient's condition, and arresting the bleeding. Some measures used in management of the bleeding include:

i. Simple non-medical interventions like uterine massage (rubbing of the uterus) or bimanual compression (squeezing the uterus between two hands). On the evidence this practice was indeed carried out by the Defendant.

ii. Medical interventions like the use of oxytocic agents or prostaglandins;

iii. Surgical interventions like intra-uterine balloon tamponade, compression sutures, litigation of blood vessels that supply the uterus or hysterectomy.

193. Dr. Bhola however accepted under cross examination that intrauterine balloon tamponades are not available in Trinidad either in public health facilities or private ones. Further Dr. Bhola acknowledged that in such a situation as that presented with the deceased, where the patient was bleeding profusely, unstable and in shock, she would not have done compression sutures. Dr. Bhola further testified that litigation of blood vessels, which is the tying off of blood vessels in the uterus to avoid the flow of blood from the uterus, would not have been done on the deceased in her condition at the time; neither would she have done a hysterectomy on the deceased.

194. Dr. Bhola testified that if the cause of bleeding is due to a coagulation disorder, then replacement of blood and clotting factors is essential.

195. Dr. Bhola stated that since the deceased had no obvious risk factors for PPH it was not substandard care to not have blood available. Dr. Bhola identified the following areas of care to be substandard by the Defendant:

i. Failure to call for help in a timely manner. The anaesthetist was not called until two and a half hours after delivery. An anaesthetist would have been invaluable in helping with resuscitation, maintaining the patient's airway, inserting lines etc.

ii. Inadequate resuscitation. The fact that the deceased remained cold, clammy, tachycardic, hypotensive and had little urine output would indicate that fluid replacement was inadequate. Although seven units of colloids (haemaccel) were given, this was after the first two hours, by which time the patient's condition had significantly deteriorated. During cross examination it was Dr. Bhola's testimony that although the Haemaccel was administered when the deceased went into shock, it appeared to have been given at a slower pace than what she would expect in an emergency situation as the one presented. Additionally, insufficient blood was given and in an untimely manner.

iii. No request was made for clotting factors. The blood which was transfused would have been packed red cells and not whole blood and so would not have had any clotting factors. Fresh Frozen Plasma (FFP) which contains clotting factors should have been requested early especially as the Defendant stated that he recognised immediately that it was a case of DIC (i.e. that the blood was not clotting). Although the correct drug, Syntocinon was used, the amounts used were insufficient.

iv. Alternative interventions not considered. Despite using syntocinon, the uterus remained atonic as uterine massage continued to be employed. If one drug fails it is good practice to consider other drugs such as syntometrine or misoprostol. It was unclear whether these were considered

and not available or whether they where not considered at all. During cross examination, Dr. Bhola testified that this drug had several side effects and should not be used on persons with heart problems, blood pressure issues, where there is some infection of the blood. Additionally, Dr. Bhola testified that possible side effects included difficulty breathing and shock. Therefore in dealing with a patient who presents with these issues, a physician should be cautious when administering this drug. When medical intervention fails to achieve uterine contraction and so control PPH, early recourse to surgical intervention should be considered. This was not done in this case.

196. In light of the foregoing evidence, the court must consider whether the Defendant was negligent in the manner particularised by the Claimant in the Statement of Claim and specifically whether the Defendant was negligent by:

i. *Failing to do or to have done any blood investigations;*
ii. *Failing to administer any or any sufficient medication to stop the bleeding;*
iii. *Failing to take urgent and immediate or any reasonable steps to stop the haemorrhage once it had started; or*
iv. *Generally failing to exercise all due care and diligence in the treatment of the deceased in all circumstance of the case.*

197. The Defendant submitted the following:

That the Defendant did administer sufficient medication (or at least what was available and reasonable) to stop the bleeding and that he did take all of the reasonable steps he could have in the circumstances to stop the haemorrhaging. The deceased suffered from was AFE and in those circumstances, despite all of the best efforts of the Defendant she

succumbed to the effects of AFE. In cross examination, Dr. Bhola admitted that some of the drugs that she suggested in her report may not have been appropriate in the circumstances. She also accepted that some of the treatment that she suggested was not available in Trinidad and that the rest required surgery which she accepted could not have been performed on the deceased at the material time as her condition was too unstable. On the evidence (of both Dr. Bhola and Dr. Daisley) it was reasonable to conclude that the deceased was suffering from AFE and having accepted this, the Defendant's treatment of the deceased fulfilled the Bolam test (from the case ***Bolam v Friern Hospital Management Committee*** (supra)) and he cannot be found to be negligent.

198. The Defendant further contended that all of the medical practitioners upon being cross examined stated "pupils fixed and dilated" meant that the patient was clinically dead. The evidence suggests that the deceased's pupils became fixed and dilated at about 7:30 p.m. which was the same time that the Claimant said that the deceased became non-responsive. Having regard to this, it was submitted that the deceased clinically died around 7:30 p.m. and thereafter all of the medical attention given to her by the Defendant thereafter was unnecessary as she had already died.

199. The Claimant, on the other hand, contended that on the totality of the evidence, a case of negligence was established, showing that:

(1) The Defendant failed to make a timely call for or obtain assistance when the deceased began to bleed profusely immediately after childbirth. On the evidence of Dr. Bhola the intervention of an anaesthetist should have been sought. The tenor of Dr. Chang's evidence was that at the time he arrived, it was too late.

(2) The rubbing of the abdomen of the deceased for four hours even though this did not stop the bleeding.

(3) Starting to give blood to the deceased two and a half hours after the bleeding started.

(4) Having only one working drip of blood while, according to Dr. Chang, two were hanging.

(5) With the Defendant's knowledge that blood and blood products/substitutes were not available at Stanley's Nursing Home, the question arises whether the Defendant ought not to have taken steps to ensure that these products were on hand in case of the need arising, more so it being Sunday afternoon, it was a high-risk pregnancy and the deceased a gestational diabetic.

200. The evidence is that the first unit of blood was started at 7:36 p.m. and that two units were given in total. The anaesthetist was called in at 7:30 p.m. and arrived at 7:50 p.m. The Defendant administered seven units of haemaccel between 5:15 p.m. and 9:45 p.m. According to the nurse's notes, blood was taken for group and cross matching at about 6:40 p.m. some two hours after bleeding would began. This estimation is based on the evidence that bleeding began immediately after the delivery of the still born child at 4:53 p.m.

201. Syntocinon was given while delivery was ongoing and an additional dose of 10 units of Syntocinon was again given prior. At 5:00 p.m. 20 units of Syntocinon were added to 300 ml of IV infusion. At 5:15 p.m. another litre of fluid, ringers lactate and another 20 units of Syntocinon were given.

202. As between Dr. Bhola and Dr. Jibodh, the evidence seemed to be that the Defendant ought to have administered more blood, blood products and Syntocinon and should have called for the anaesthetist earlier.

203. Despite the Defendant's diagnosis of AFE he gave evidence that to control PPH one would use oxytocin, massage the uterine fundus, ensure there are no vaginal lacerations actively bleeding and replace blood loss and give a volume expander. All of these, according to the Defendant, were done. He explained in cross examination that he continued the uterine fundal massage for the length of time he did so as to ensure that he

left no stone unturned in arresting the potential or potentially more bleeding in the patient.

204. Although the Defendant accepted that the length of time between the delivery and the first administration of blood was long, he explained that there was no blood available at the nursing home and blood had to be requested.

205. On this point, Dr. Jibodh testified that he was not aware if these were available to the Defendant at the time but acknowledged that there is a difficulty in obtaining these in an emergency situation from the Blood bank.

206. The Defendant also testified that even if two units of blood was given somewhere between delivery and 5:15, it would not have made a difference in the deceased's survival. The Defendant explained that the turn of events, from delivery to bleeding, was sudden and catastrophic. He stated that he knew even before the deceased went into shock what the outcome would have been, having observed the pale-pink, not clotting blood.

207. On an evaluation of this evidence, the court accepts that as bleeding was not anticipated prior to delivery and it was not expected that there be blood on hand. In fact, Dr. Persad emphasised in cross examination that it was only in cases where it is anticipated that there would be serious haemorrhaging would blood be sourced before-hand in preparation for delivery. This not being the case, it was not unreasonable or negligent that the there was no blood on hand.

208. It was Dr. Manning-Alleyne's evidence that when the Defendant arrived she informed him that the deceased had previously suffered from PPH. Although there was no evidence supporting that the Defendant was in fact told this by Dr. Manning-Alleyne this evidence was not challenged. The court believes this testimony. It would therefore mean in the court's view that when the representation of Dr. Manning-Alleyne was made

to the Defendant, he ought to have taken that representation on board and acted consistent with the accepted practice in those cases in case Dr. Manning-Alleyne's statement was accurate. Nothing less than prudence was required in the light of the information provided whether or not it was correct. This is so despite the evidence that at 7:30 the deceased appeared to be clinically dead. More than sufficient time had elapsed between the time of birth and 7:30 during which steps should have been taken to source and administer more blood and blood products.

209. It means that tests should have been performed on the deceased immediately in an effort to begin the process of sourcing blood. This means that the Defendant ought to have requested the blood at an earlier stage than that which he did. More than sufficient time had elapsed between the time of birth and 7:30 during which steps should have been taken to source and administer more blood and blood products.

210. In so finding, the court accepts that obtaining blood from the blood bank was at the time a difficult task. There was evidence by Dr. Jibodh, Dr. Persad and Dr. Bhola that a request had to be made to obtain blood. Dr. Persad opined that in Trinidad and Tobago, there is a significant shortage of blood and blood products and products like platelets or cryoprecipitate are very difficult to procure and almost never in a timely fashion. This fact was not disputed. But what is clear is that an attempt was not made within the earliest possible time. It was not sufficient simply to sit by and say that the process of obtaining blood was a difficult or lengthy one.

211. Dr. Charles' evidence however was that blood products were available for use in aiding the cessation of haemorrhage in a post partum situation. The success of their usage depends upon the underlying cause of the haemorrhage. He testified by his report that a system was in place in 2003 at the blood bank for the procurement of blood products ***should the need arise***. The tenor of his report appeared to be that availability depended on the urgency of the request in some instances.

212. In any event, there is ample evidence which the court accepts, that more blood and blood products ought to have been given. This evidence comes from not only the witnesses for the Claimant but also the witnesses for the Defence. On this basis the court finds that the Defendant was negligent by:

> *"Failing to take urgent and immediate or any reasonable steps to stop the haemorrhage once it had started"*

213. Further, Dr. Bhola testified that although the correct drug Synotcinon was used, the amount used was insufficient. Dr. Persad explained that if there is significant bleeding after delivery the dose that can be given of Syntocinon ranges from 20 units to 80 units in an infusion. What is important, according to the doctor, is arresting the bleeding as quickly as possible. He explained that if too high a dose is given during labour there is the possibility that the uterus can rupture but once the foetus has been expelled there is no possibility of the uterus rupturing so a higher dose of the drug can be given. Dr. Persad testified that from the notes he perused there was no sign of a ruptured uterus during labour in the deceased's case.

214. By the court's estimation, about 50 units of Syntocinon were given post delivery. This is less than the maximum possible dose as stated by Dr. Persad namely 80 units. It appears therefore that in the course of events the practice would have been at this stage and in these circumstances to administer more units at a faster rate since all ought to have been done to arrest the bleeding as soon as possible.

215. The court accepts that there is no sure way to know if more Syntocinon would have actually stopped the bleeding. The court is of the view that it was however necessary in the deceased care as being a standard practice in the field. If the maximum dose could have been 80 units, then in a situation, assessed by the Defendant himself as catastrophic and sudden, the amount given ought to have been closer if not at that 80 units. In the circumstances, the court finds that the Defendant was negligent by:

"Failing to administer sufficient medication to stop the bleeding"

216. Further, having assessed the situation as critical, the Defendant ought to have enlisted assistance earlier than when Dr. Chang was called. Both Dr. Bhola and Dr. Jibodh testified that they would have called for help.

217. Particularly, Dr. Bhola was of the view that calling for the anaesthetist would be helpful in resuscitation, maintaining the patient's airway, setting up intravenous lines and drawing blood, especially in an emergency situation where the patient's veins have collapsed. In the present scenario the court notes the evidence that by the time Dr. Chang was called (around 7:30 p.m.) there was only one intravenous access in operation. The court understands from the evidence that better intravenous access would mean that the blood and drugs would be administered faster, resulting in a quicker response. The evidence of Dr. Bhola was that insufficient drug was used and that for instance haemaccel was being administered at a much slower pace than expected. In this regard, an anaesthetist's help at an earlier stage might have allowed for faster absorption of the blood and drugs being administered.

218. Again, there is no sure way to know whether this would have been the guaranteed result, however, the court accepts calling for help as being standard practice. As a consequence the court finds that the Defendant was negligent by:

"Failing to exercise all due care and diligence in the treatment of the deceased in all the circumstances of the case"

Causation

The Bolam test and causation

219. Lord Browne-Wilkinson, in delivering the decision of the English Court of Appeal set out the link to be made between the *Bolam* test and the issue of causation in the case of ***Bolitho v City and Hackney Health Authority [1997] UKHL 46; [1998] AC 232; [1997] 4 All ER 771; [1997] 3 WLR 1151 (13th November, 1997).***

> " *The locus classicus of the test for the standard of care required of a doctor or any other person professing some skill or competence is the direction to the jury given by McNair J. in Bolam v. Friern Hospital Management Committee [1957] 1 W.L.R. 583, 587:*
>
> > *"I myself would prefer to put it this way, that he is not guilty of negligence if he has acted in accordance with a practice accepted as proper by a responsible body of medical men skilled in that particular art . . . Putting it the other way round, a man is not negligent, if he is acting in accordance with such a practice, merely because there is a body of opinion who would take a contrary view."*
>
> *Before your Lordships, Mr. Brennan, for the appellant, submitted, first, that the Bolam test has no application in deciding questions of causation and, secondly, that the judge misdirected himself by treating it as being so relevant. This argument, which was raised for the first time by amendment to the notice of appeal in the Court of Appeal, commended itself to Simon Brown L.J. and was the basis on which he dissented. I have no doubt that, in the generality of cases, the proposition of law is correct but equally have no doubt that the judge in the circumstances of the present case was not guilty of any self-misdirection.*

Where, as in the present case, a breach of a duty of care is proved or admitted, the burden still lies on the plaintiff to prove that such breach caused the injury suffered: Bonnington Castings Ltd. v. Wardlaw [1956] A.C. 613; Wilsher v. Essex Area Health Authority [1988] A.C. 1074.

***In all cases the primary question is one of fact**: did the wrongful act cause the injury? But in cases where the breach of duty consists of an omission to do an act which ought to be done (e.g. the failure by a doctor to attend) **that factual inquiry is, by definition, in the realms of hypothesis**.*

220. Similarly in the case of ***SWRHA v Harrilal*** (Supra), Their Lordships of the Court of Appeal set out the approach to the issue of liability at paragraph 13 as follows:

"The question of liability, ought, in our judgment, to have been approached from two perspectives, firstly, whether the hospital was negligent in its treatment of the respondent during the course of her stay and particularly, during the delivery of her baby and if yes, whether such negligence was the cause of the stillbirth. The first issue necessarily involved finding the existence of a duty of care to the respondent and considering whether there was a breach of that duty. The second issue, being one of causation turned on the medical evidence."

221. Therefore this court must ask itself the following questions in relation to each finding of negligence:

i) *Was the failure of the Defendant to take urgent and immediate steps to stop the bleeding when it had started the cause of the death of the Deceased?*

ii) *Was the Defendant's failure to administer sufficient medication to stop the bleeding the cause of the death of the Deceased?*

iii) *Was the failure of the Defendant to exercise all due care and diligence in the treatment of the deceased in all the circumstances of the case the cause of death of the Deceased?*

222. When the evidence is considered in the round, there is no witness who could definitively say that the deceased would have survived had the Defendant called for help, administered more medication, or gotten and administered more blood at an earlier stage.

223. Dr. Jibodh testified that although the patient should ideally have been given more blood, fresh frozen plasma, platelets and cryoprecipitate he qualified this by saying it ought to have been given **if** available.

224. Had the Defendant obtained blood at an earlier intervention and administered it would the patient have survived? Had the Defendant administered a larger quantity of Syntocinon would the deceased not have died? Had the Defendant enlisted the help of an anaesthetist at an earlier stage would the Defendant's negligence not have caused the deceased's death? No one can say for sure. Life is fragile in nature and the answers to these questions will never be known. However, these are not matters that the Claimant must convince this court of. The standard of proof required is that on a balance of probabilities. In other words is it more likely than not that the omissions of the Defendant in the treatment of PPH was the cause of death of the deceased by PPH? The body of testimony of all the medical practitioners appear to all appoint in the same direction. They all point to the administering of more blood and blood products at an early stage as an accepted method of treatment. The court interprets this to mean that the earlier the patient is given an adequate supply of blood and blood products the more likely the patient is to survive an onset of PPH. Dr. Bhola opined, and the court accepts, that the sooner blood and blood products are replaced, the less the risk of organ damage and death. She cited that the Confidential and Enquiry into Maternal Deaths (a UK report produced every three years) has highlighted that one of the major factors in the adverse outcomes associated with severe haemorrhage is a delay in initiating appropriate

management. It therefore follows that it is 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. In this regard the court does not accept the evidence of the Defendant that the infusion of more blood would not have made a difference. The answer to all three questions posed at paragraph 218 is therefore yes.

225. In conclusion the court wises to add that it appreciates the herculean responsibility with which the Defendant was confronted without notice. Medical Practitioners bear the unenviable task of often times managing the fragility of human life under tremendous pressure and dynamic circumstances. The management often involves literal life and death decisions with no time for leisurely reflection. This is perhaps a feature which is unique to very few professions. But be that as it may, it is a responsibility entrusted to them by the public at large in whose collective and singular interest they must at all times act by adhering to the accepted practice in their area of speciality even under the most dire circumstances.

226. There shall therefore be judgment for the Claimant against the Defendant on the issue of liability. The Defendant is to pay the Claimant's costs of the claim on the prescribed scale. Damages are to be assessed and costs are to be quantified by a Master on a date to be fixed by the court office.

Dated this 26th day of July 2012.

Ricky Rahim
Judge

Judicial Research Assistant: Ms. Kimitria Gray