**IN THE HIGH COURT OF SOUTH AFRICA**
**(EASTERN CAPE LOCAL DIVISION, MTHATHA)**

**CASE NO. : 1476/2014**
**Reserved on: 02 November 2016**
**Date delivered: 17 October 2017**

In the matter between:

**N. M.** obo **S. M.** Plaintiff

And

**THE MEMBER OF THE EXECUTIVE COUNCIL FOR HEALTH, EASTERN CAPE PROVINCE** Defendant

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**JUDGMENT**

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**MAJIKI J:**

[1] The plaintiff sued the defendant for general damages in her personal capacity for a sum of R500 000.00. She simultaneously sued for a sum of R15 033 200.00 in a representative capacity for her minor son, S.. The defendant is sued in the representative capacity as a person vicariously liable for the negligent acts of the employees of the department of health, whilst acting within the course and scope of employment with the defendant. The plaintiff has alleged that the damages arose from inadequate and negligent medical treatment by the medical personnel who were involved in her treatment following her admission at Siphethu hospital (Siphethu) on 25 April 2011

during the birth of S.. As a result of the alleged negligence S. suffered hypoxic ischemic insult in consequence of which he suffered infantile epilepsy cerebral palsy secondary to birth asphyxia and spastic tetraplegia.

[2] The action is defended by the defendant who has in the main denied negligence on the part of the personnel at Siphethu. In the alternative, the defendant denies that, if any negligence is found, it has a causal link to S.'s condition. At the commencement of trial, by agreement between the parties the court made an order in terms of rule 33(4) of the Uniform Rules for separation of the issues in the matter, merits and quantum. The trial proceeded in respect of determination of liability only at this stage.

[3] Both counsel submitted comprehensive heads of argument in the matter, for which I am very grateful. Needless to say, same were very useful as the proceedings in the matter suffered many interruptions, some of which could have been avoided. The record itself consists of no less than 17 volumes which are not sufficiently paginated. The trial proceeded over a period of no less than 17 days from 3 August 2015 to 25 October 2016, continually. Some witnesses had to be interposed and continue with their testimony after considerably lengthy testimony of some or other witnesses. These ordinarily, would have posed more challenges, without the aid of the effort counsel put in and compiling the heads of argument.

[4] At the end of trial the issues that the court had to determine related to the costs only, in the plaintiffs' claim in her personal capacity; costs of interlocutory application for the abandoned application by the plaintiff for the re-opening of her case and the entire claim on the merits, in respect of S.. The main issue therein being whether the medical personnel at Siphethu acted negligently, if yes, whether the brain injury of S. is causally linked to the alleged negligence.

[5] The parties recorded that the injury occurred during intrapartum period, they recorded the term as the period between 38 to 42 weeks. (end of the 37th week). The report of Professor Andronikou was admitted.

[6] The following facts are common cause:-

The plaintiff was admitted at Siphethu at 08:28;
She was first examined at 08:30; she was 8cm dilated;
The foetal heart rate was 120 at 08:30 which was re-assuring;
The membranes raptured at 08:45;
Foetal distress was diagnosed at 08:56 at 95 to 63 beats per minute and there was grade 3 meconium;
The plaintiff was fully dilated at 09h00;
The doctor was called and came in 30 minutes later at 09:05;
S. was delivered naturally at 10h00 and had to be resuscitated.
Brain damage takes 10-46 minutes and 15 to 46 minutes to be irreversible.

[7] The plaintiff testified and called two expert witnesses in support of her case. According to the plaintiff she first felt labour pains around 01h00 in the early hours of 25 April 2011. The pain subsided but she felt it again around 3a.m. She together with her mother and sister unsuccessfully tried to call in an ambulance. They only managed to get private transport before 07h00. At 07h00 her waters broke. She got to hospital at 08h00, she was shown a bed, she lied on it and a drip was put on her. The nurse checked the baby and told her that the baby was tired whilst she simultaneously took down notes. The nurse phoned the doctor and advised that there was someone who should have given birth but had not. The baby appeared when the doctor arrived and he asked that she be sutured. The medical staff asked her to push, the child was not coming, and they took out the baby.

[8] S. was put on oxygen and taken away. He was brought to her after 3 hours, she tried to breast feed the baby, the baby's mouth would open for the breast but not close so as to enable the baby to suck. S. was left with her overnight and remained with her until their discharge. During the time she had the baby the nurses visited them twice. S. was crying a lot, the whole night. When she told the nurse that the baby could not suck the nurse gave the baby something with a syringe. The plaintiff also gave the baby tea at 04h00.

[9] They were discharged around 14h00 and not at 10h00. She had to start at the dispensary to collect medication she got there during lunch and only got medication after 14h00. She was at that time not able to feed the baby. She was not told about how to feed the baby. They were not examined upon discharge. She was not advised to come back about the feeding problem. She first fed the baby with a glass and later formula with a bottle.

[10] Under cross-examination she said Ms Noncedo Mpisane who delivered her baby, was harsh to her. She said she must push because the baby was tired. She could not be certain if she arrived at 08h00 or at 08h28 as the maternity case record indicated. She denied that she told sister Mpisane that she started having labour pains around 20h00. She agreed that she was discouraged from pushing prematurely which advice she complied with. The baby was checked with an instrument, her description fitted a stethoscope, long after her arrival she was told the baby was tired. After delivery, the baby was put in the glass. She denied that she had taken "umchamo wemfene" to expedite delivery, she did not even know "umchamo wemfene". She told the nurse she does not use traditional medicine because of her family's religious convictions. Upon discharge she was told to come back on 05 February and she did come back. She denied that they were given adequate medical care, she was not told that her baby was put on oxygen and would be disabled. When asked by the court, she said she may not remember everything that happened upon discharge, but she was given contraceptives, the baby was weighed and baby was measured.

[11] Professor Andronikou's undisputed report recorded the following with regard to the Magnetic Resonance Imaging (MRI) scan of S.:-

(i) Bilateral Symmetrical T2/Flair high signal abnormality and volume loss in the
- Inter vascular watershed regions anterior and posterior;
- Para falcune and peri sylvain watershed regions;
- Peri-Rolandic regions
- Deep and periventricular matter of the cerebral hemispheres;
- Putamina especially posterior
- Hippocampi

(ii) High signal without volume loss involving both thalami centrally

(iii) The vermis shows left sided high signal with mild volume loss

(iv) Ex vacuo dilation of the lateral ventricles;

(v) The corpus colosseum thin-worst centrally

His comment is that those were features of chronic evolution of a global insult to the brain due to hypoxic ischaemic injury of acute profound variety, most likely occurring at term.

[12] Professor Smith is the Clinical head of neonatal intensive care unit at Tygerberg Children's hospital. In his specialisation he does get involved with decision making with regard to optimising the outcome of high risk new born babies. After delivery he would get involved with new born babies for as long as they require intensive care and support, which usually is up to three months. Sometimes he also makes follow ups with them until they are about 13 years old. He had prepared two reports in the matter. One before he had seen maternity case record, and was formulated on probabilistic model. Subsequently, he amended his report upon receipt of the maternity case record.

However, his initial model proved to be correct even after receipt of the records.

[13] Prof Smith started his testimony by confirming that the plaintiff attended antenatal clinic regularly and there were no irregularities. According to the maternity records she was a 23 year old primigravida. Her labour commenced at 20h00 on 24 April 2011. Her pregnancy was recorded as 38 weeks. At 8cm dilation of the cervix, it would approximately take two hours for her to deliver the baby. Caput 3 plus was recorded. The plaintiff's membranes were bulging and intact, which would pose difficulty in palpating caput. The maternity record also revealed that she admitted using "umchamo wemfene" to speed up labour. At birth the head circumference indicated gestational age of 39 weeks.

[14] According to Prof Smith there is a link with some herbal medication and bringing about meconium when some mothers, about 30 percent, take such medication. However, there is little research as to the ingredients of the medication. The record reveals that the foetal heart rate was listened to at 08h30 and 09h00, but there is no indication that it was listened to before, during and after a contraction, every half an hour. Such would have been what was expected because the plaintiff was in active labour. The medical staff had recorded a plan to monitor foetal and vital signs and report to medical officer. The foetal heart rate of 120 was low normal because the normal heart rate is 120 to 160 beats per minute. When the membranes raptured at 09h45, there is also a record of seeing meconium grade 3, which is normally a surrogate marker of possible foetal distress. Some babies, 15 to 20 percent still pass meconium even if there is no foetal distress. In S., subsequently they found that the foetal heart rate dropped to 95 to 63. The combination of low foetal heart rate and meconium indicated acute emergency. The baby was ready to be born as the mother was fully dilated. The doctor (Dr Fateye) was informed after trying to call the doctor on call. The doctor came at 09h05 and the foetal

distress diagnosis is noted. It is also recorded that the mother was discouraged from bearing down.

[15] The record notes how they managed the situation, around 09h00, they inserted catheter to drain urine, positioned the mother on the left side, gave the mother oxygen. The mother had been put in a drip at 08h30. This was all correct in the circumstances. Thereafter there is no further record until the baby is delivered at 10h00.

[16] According to Prof Smith the medical staff ought to have expedited delivery by applying either forceps or vacuum to ensure delivery within 20 minutes. The baby was born an hour later, normally, without assistance, episiotomy was performed. No pain relief was given. The baby was born in a compromised condition and with complications. There is a record of low Apgar score due to foetal distress, the mother had been uncooperative. They applied a resuscitation bag, with a face mask to the baby and gave it adrenalin and narcan. The Apgar scores were $^{2}/_{10}$ at one minute after birth, respiration was zero, the colour scored at 1. After resuscitation there was some improvement. At five minutes the Apgar score was $^{5}/_{10}$ and $^{9}/_{10}$ at 10 minutes. The meconium was suctioned from the airways, and the baby was given a cardiac massage.

[17] Prof Smith then records that the baby was not properly observed. He was taken to the mother and they were discharged in 24 hours. There are no neonatal notes from11:20 to 23h30 (12 hours). The first examination of baby was at 11h00 and next at 11h20. At 11h00 it was recorded that the baby had well-nourished pink appearance and there was caput. The sutures overriding, asymmetric chest movements, sucking reflexes weak, grasp reflexes weak and cry absent. These are indicative moderate early onset neonatal encephalopathy. At 11h20, these abnormalities were still recorded. Poor sucking reflexes but swallowing reflex good. Three millilitres/EBM given to the baby and

meconium passed. Baby taken to the mother. The next assessment is at 23h31, baby is crying a lot not sucking well given Dextrose 5 percent stat. Next examination was at 06h00 the next day, baby still not sucking well, given 20ml expressed breast milk. According to Prof Smith, the baby ought to have been in intensive care unit, put in a drip, have its oxygen and sodium measured and its blood pressure monitored. He referred to standard treatment guidelines handed out by the department of health which are the required standards. He said they were not followed. Giving oxygen in an unblended manner to a baby who had just been resuscitated could cause those molecules to injure the brain even more. Resuscitation needs to be administered in a neonatal high or intensive care, if available, alternatively transfer the baby to an academic hospital. If not available, vital signs and functions should be properly monitored, because if left on their own they may incur secondary injury.

[18] According to him when encephalopathy has manifested after birth, there is room to manipulate the circumstances to maximise a better outcome. S. would still be handicapped but the ultimate disability could still be influenced and avoid another insult being super imposed after birth. However, the extent of how much it could be minimized is not known. Cerebral palsy is static, manifested at about 2 years of age, being manifestation of the maturation of the brain, the insult itself having occurred already during birth. Encephalopathy is in three stages. Those in mild to moderate state improve within the first seven to ten days after birth and can be sent home between day 8 and day 15 of life. It is not possible to know right away if the baby is fine and will not evolve to stage 2 of encephalopathy. At 10 months S. had delayed developmental milestones.

[19] According to the radiologist report, the MRI scan indicate no other explanation other than hypoxic ischemia. However, Prof Smith indicated that he had limited expectees in radiology.

[20] The management of S. after birth was substandard and that probably aggravated the primary intrapartum injury. She was discharged within 24 to 36 hours of birth whilst still could not latch or suck properly. That risks the baby into having hypoglycaemia. Even though her respiratory distress had resolved, he still regarded S.'s discharge as premature. There was no guarantee that encephalopathy would not progress to a more severe degree.

[21] He then summarised Volpe's opinion, in the article, Neurology of the new born, which requires that in order to say a baby who developed cerebral palsy, it was because of intrapartum labour insult, that baby must have had encephalopathy during the early neonatal period. As for strong contractions caused by previous intake of herbal medicines, that would be indicated in the compromise of the foetus, and can be detected when the foetal heart is listened to. Furthermore, the patient is supposed to be given a drug to suppress the contractions, whilst doing all that, ensure that delivery is expedited. The delivery cannot be delayed for an hour after the recovery of foetal heart rate.

[22] He went on to examine whether the intrapartum asphyxia could have been prevented by expediting delivery. He dealt with features which according to Volpe must have been present in order to conclude that intrapartum insult caused neonatal brain injury and later cerebral palsy:

- the presence of bradycardia
- the presence of foetal distress

Prof Smith was therefore satisfied that S. met those criteria. Also with the head circumference that was normal at birth and became smaller in months.

[23] With regard to Dr Kara's opinion, Prof Smith confirmed that the sugar levels were normal at 4.3. However, that could only be at 11:20 and no other time. According to the records that were the time of examination and not 16h00. He also acknowledged that Dr Kara in his amended report stated that,

it appeared that S. appeared to have moderate encephalopathy, according to Professor Smith which is the doorway to cerebral palsy. Dr Kara also noted that S. required pulmonary resuscitation, therefore it is possible that encephalopathy was sufficient to have resulted in cerebral palsy. According to Professor Smith, Dr Kara acknowledged no other possible cause for neonatal encephalopathy through which cerebral palsy developed. He disputed Dr Kara's suggestion that S. did not have moderate to severe encephalopathy lasting more than seven days. S. was discharged in 24 hours still in a state of encephalopathy; no one could tell what might happen in seven days without having seen the child. According to him Dr Kara's concession in the amended report about possibility of encephalopathy changed everything he had said in his earlier report, suggesting that the facts about S.'s condition do not suggest that he had moderate to severe encephalopathy at birth.

[24] Under cross-examination he clarified that he has good knowledge and does get involved in decision making in high risk pregnancies prior birth, he therefore could comment and opine on standard of management in as far as it relates to foetal outcome. However, he would not deal with all areas of obstetrics, like a qualified obstetrician would. Nevertheless, he was able to deal with obstetric management of S. which led to his cerebral palsy. He confirmed that in many cases the cause of cerebral palsy remains unknown as that it can be precipitated by factors that occur before pregnancy, during pregnancy, during labour, at birth and in new born stages. Furthermore, because it is difficult to causally link a factor to the outcome of cerebral palsy, the whole clinical course of pregnancy has to be considered, for example, disease the mother developed, medication, seizure and etc.

[25] He conceded that nurses at Siphethu, a level 1 district hospital, complied with national department of health guidelines to the extent of carefully reviewing the antenatal card. The foetal heart rate was assessed at 08:30 and 08:56, in compliance with the guidelines. He did not think the hospital staff did anything wrong at that stage, up to the time foetal distress was diagnosed. The heart was monitored, however the record does not state whether the monitoring was done before, during and after a contraction. There was a plan to start partogram to monitor progress of labour and draining of 800 millilitres (ml) of urine. When it was suggested to him that it is not known if taking umchamo wemfene whose ingredients are not known, could not have adverse consequences, he said other than increased contractions, it has not been linked to developing encephalopathy. Whereas the MRI scan herein gives no other reasonable explanation other than hypoxic ischemia, the presence of grade 3 meconium is the likely maker of foetal distress. He disagrees with a proposition that meconium grade 3 cannot form in less than 30 minutes. According to him it is always in that grade, babies pass it immediately after birth. The meconium passed, and recorded at 08:56 was fresh, not diluted and not stained the skin or umbilical cord. It was there for less than one or two hours. In the present case it is unlikely that it formed in less two hours because the foetal heart rate was re-assuring at 08h30.

[26] For Prof Smith his main concern was foetal distress which resulted in asphyxia. According to him the pointers of foetal distress were presence of meconium grade 3 and low foetal heart rate. Asphyxia caused cerebral palsy. The reason for foetal distress is not clear. It could have been excessive contraction effect on the blood supply through the placenta to the foetus, which necessitated administering a drug to manage the contractions. The fact that there was distress, delivery had to be expedited within 30 minutes. It takes 17 to 46 minutes, authorities say 10-46, before brain damage occurs from the point of registering acute foetal distress. From the point of low pulse rate it takes 15 to 46 to induce irreversible brain damage. Therefore to have delivery before 30

minutes period, likelihood of surviving with little or no disability is well published. So after 30 minutes the damage is irreversible. Even though it is not known what had been the duration, magnitude of foetal distress in the baby when it was diagnosed at 08h56. At 08:30 the foetal heart rate was re-assuring. If it can be hypothetically presumed that the foetal distress occurred 10, 15 minutes or so before it was diagnosed at 08h56, and carried through until the baby was born at 10h00. The baby would not have survived the period of acute hypoxic injury had it been too long, exceeding 70 minutes. For the baby to be delivered with minimal or no disability it required to be delivered within 30 minutes, so there was still 15 minutes after diagnosis at 08h56 within which to deliver a non-compromised baby, around 09:30.

[27] The baby had not reached terminal bradycardia when foetal distress was recorded at 08:56. The foetal heart rate needed to be 60 and less per minute for it to reach terminal bradycardia. Medical personnel failed to continually or continuously monitor the foetus and treat the plaintiff after they diagnosed foetal distress. Labour can be prolonged for several hours, and at 4 cm dilation it can take further 6 to 7 hours. From 20h00 previous night to about 24h00 she was in latent phase which poses no risk. For the plaintiff, a primigravida to be 8cm at 8:30 her active labour started around 4am that morning. Active and late active phase is after 7 to 8 centimetres dilation and that is the risky stage. She was not a high risk patient. She was to be monitored at all material times. They failed to do so between 9 and 10 hours. They allowed her to bear down and deliver on her own. Caput 3 could not have had any significance to asphyxia. He conceded that ceasar and vacuum extraction could not be used after 8cm dilation also, at 09h00 when she was fully dilated. However, modern exit forceps could have been used, even when there was caput, they are relatively easy to apply and safe.

[28] The injury occurred during the last hour of labour and was probably compounded by the substandard neonatal care after birth, in the window of 6 to

8 hours. He disagreed with the contention that the injury occurred in the 12 hours the patient had been in labour or any other earlier period, as it was said Dr Shweni would suggest. Meconium which was caused by hypoxic ischemia was fresh, not older than 2 hours. The start of a sentinel event was when foetal heart rate dropped to the level of close to terminal bradycardia at 8h56. As regards Dr Shweni's report, Prof Smith said Dr Shweni did not deal with Dr Kara's acknowledgement of the possibility of hypoxic injury in the intrapartum period, he also did not deal with Dr Kara's pointing out that there was sudden bradycardia lasting one hour or with the dropping in heart rate, at all and finally, that Dr Kara said it was possible that the encephalopathy was sufficient to result in cerebral palsy. All other possibilities were excluded by Prof Andronikou's report. In re-examination Prof Smith said if the expected date of delivery indicated in the antennal clinic card was appropriate, the plaintiff was 2 weeks overdue, and that would put her in a higher risk category because being postdates is associated with a higher likelihood of complications.

[29] Dr Hulley, a medically retired obstetrician and gynaecologist also testified. He worked in Mthatha General Hospital, a referral hospital for Transkei hospitals during the years 1970 to 1994. They used to handle about 300 to 350 deliveries a month. Most deliveries were done by midwives and he was doing the supervisory role, in particular deliveries with complications. He also practised as a private practitioner at St Mary's Private Hospital, Mthatha until 2010, thereafter he practised at Margate Private Hospital. In his active service life he did about 4 000.00 deliveries including, about 15 000 caesarean section deliveries, some being complex gynaecological situations, including those similar to the plaintiff's present situation. He worked in other public hospitals and is aware of standard of services applicable there, too.

[30] Dr Hulley said according to antenatal records, the plaintiff's attendance started on 6 January 2011. Her further attendance was on 24 February and 24 March 2011. Her weight was 56,65 and 79 kilograms respectively which

weight gain according to him was excessive and needed to be watched because she was nearing her expected date of delivery. There was nothing significant about her health status. Her last menstrual period was 3 July 2010, her expected date of delivery was 10 April 2011. She therefore delivered more than two weeks postdates. The clinic gave her a return date 19 days beyond her expected date of delivery. That was not appropriate and she immediately became a high risk primigravida. In fact from 10 weeks patients need special attention as complications are likely to occur. Sister Mpisane ought to have picked this up when the patient presented the antenatal clinic card. A post mature patient runs the risk of placental insufficiency. He said the patient gave him the time for the onset of labour as 01h00, he did not know where the time of 20h00 appearing in the record came from.

[31] The draining of 800ml urine which appears in three places in the record as being at 08h30 was a proper move because the urine impedes labour, it keeps the foetal head up and not descending to the pelvis. Indeed afterwards it is recorded that the presenting part marked. The foetal heart rate was 120 at 08h30, which was re-assuring. At 08h45 membranes raptured not at 08h56. According to Dr Hulley the urine could not have been drained at 09h00.

[32] Immediately after 09h00 when the cervix was fully dilated, foetal distress having been diagnosed, with the presence of meconium grade 3 and following the medical staff's correct measures of managing the foetal distress, the baby should have been delivered. The guidelines state so and his practical experience dictates. The baby was delivered at 10h00 and the only assistance to the plaintiff was episiotomy. The foetal heart was not measured after diagnosis of foetal distress which had reached 63, a stage associated with terminal bradycardia, a clear emergency that called for monitoring every 5 to 10 minutes. The note in the maternal records indicates, report to medical officer. Either a report was made or was to be made to the doctor, but it seems

as if Dr Fateye was informed after 30 minutes of trying to look for doctor on call. Dr Fateye came at 09h05.

[33] A caesarean section would not have been appropriate under the circumstances, the head had deeply engaged. Vacuum or forceps would have been the appropriate way of terminating labour. In the past, advanced midwives were trained on how to do vacuum extraction or forceps delivery. As for the doctor he ought to have been able to do both. Dr Hulley's preference would have been forceps delivery because it is quick, it does not crush the baby's head. If Dr Fateye was not able to do forceps delivery, the hospital ought to have had a doctor who could. There would have been no reason for Dr Fateye to be at maternity ward if he could not do forceps delivery. If the labour had no complications it would have been appropriate for a primigravida to deliver in less than 12 hours since the onset of labour.

[34] Dr Hulley was adamant that the reading of the maternal record, on pages 13 and 14, is definitely nil, usually level 3 is indicated with pluses not lines. The moulding is recorded as 3 pluses that had been crossed out as a nil, at page 14 that had been deleted and moulding zero that had also been crossed out and error written. The caput and moulding normally go hand in hand, but there could be a slight moulding even if there is no caput. The zero moulding accords more with nil caput in pages 13 and 14. Caput is a mere soft swelling which indicates the celphalpelvic disproportion. (CPD), it does not indicate brain damage and subsides after delivery. As for umchamo wemfene, he had no knowledge of what it contains it is supposed to be a uterine stimulant but the plaintiff's contractions were normal and not excessive. He would ignore information about it, if he attended the plaintiff.

[35] The baby ought to have been expeditiously delivered long before 10h00, around 09h00 and not with normal vaginal delivery. The mother did not get pain relief, she could have been uncooperative. Low Apgar was due to foetal

distress. Adrenalin had to be given together with administering cardiac massage; the baby was in serious trouble when it was born. It was not latching, not sucking and was prematurely given expressed breast milk, not even using nasogastric tube. In a primigravida, there would be no sufficient breast milk but colostrum in any case at that stage. Glucose test result was satisfactory. However, the child could not have had a score of two for vigorous cry, at 10 minutes, when it was zero at birth and an hour later, again score zero. The mother actually told him the baby cried after three to four hours. The respiration score was one, slow and irregular. The baby ought to have been referred to a tertiary hospital and not discharged in 24 hours without guidance to the first time mother on how to handle a child who had been so unwell at birth.

[36] Dr Hulley disputed what was contained in sister Mpisane's report that vacuum extraction would have been dangerous; that it would not abate risk to the foetus and that caput could contribute to brain damage. Even when vacuum was applied inappropriately, the risk to the foetus would be much better than to wait for delivery an hour later. He found no basis for the suggestion that when the plaintiff got to the hospital irreversible brain damage had occurred to the foetus or was rapidly progressing. He stated that he would have preferred a Jacques catheter than Foley's catheter. As for pushing, the time the plaintiff would have been said to be pushing prematurely, and told not to push, was when she was still not fully dilated. When delivery is expedited, and instrument already applied, she would push. Expediting delivery would pose less risk of child inhaling the meconium and causing meconium aspiration injury to the lungs. The best reversal of foetal distress is by delivering the baby, on top of the correct measures the hospital already undertaken, like putting a drip, lying patient on the left and giving patient oxygen.

[37] He disputed the suggestion in Dr Shweni's report that the discharge of the mother and the baby the next day indicates that there was nothing wrong

with the baby. After low Apgar features they ought to have done adequate investigation through blood gasses and reference to paediatrician or neonatologist, in order to conclude that that baby was fine. Dr. Shweni makes no reference to dropping of foetal heart rate to 63 and that the baby ought to have been delivered immediately after 09:05.

[38] Under-cross examination he said he did not know the absolute cause of hypoxia in this case, but probably it is the placental insufficiency or lack of good placental blood flow. The placenta started to fail, it got compromised during the last two hours of labour, around second stage of labour. Placental insufficiency could have been caused by post maturity, post expected delivery. HIE is caused by hypoxia in utero, foetal distress hypoxia, prolonged period of abnormal foetal heart. In his opinion that is the assumption. Causation to him was immaterial the reported issue was foetal distress. Foetal distress was most probably caused by placental insufficiency, because there was no sign of separation of the placenta. Placental insufficiency has no bearing to the cause of HIE. What led to HIE was the mismanagement of foetal distress during the second stage of labour.

[39] About the baby being tired, it was pointed out to him that the examination that confirmed such state of events happened at 08h00, according to the plaintiff's evidence and the doctor's notes. He said according to the clinical records, the first assessment happened at 08h30. The nurse could not tell the plaintiff the baby was tired, before the assessment and before the diagnosis of foetal distress of which her recording was at 08h56. Dr Hulley said there must have been a mistake in the time given by the plaintiff. He agreed though that the recordial followed the actual occurrence of foetal distress. According to him it occurred later than 08h30, it can happen in minutes in this instance, maybe fifteen minutes before the recordial, because there was also no record of meconium stain when the plaintiff raptured the membranes at 08h45. In fact it seems as if the raptured membranes were not

examined. There is no indication of how liquor was. Furthermore, at 07h00 she said she also broke clear water. Even if the membranes broke at 08h56, and meconium had formed earlier, in two hours, which is unlikely when foetal heart was normal at 08:30, the problem for the medical staff started when they neglected the plaintiff after the diagnosis of foetal distress.

[40] It was pointed to Dr Hulley that upon receipt of clinical records, in his supplementary affidavit he does not address issues arising therein. He attacked the voracity of the documents. He conceded that he did not deal with the issue of "umchamo wemfene;" the monitoring of a foetal rate every ten to fifteen minutes; the tests that should have been made on the baby before discharge; the transfer of the baby to Nelson Mandela Academic hospital and the plaintiff being post mature and a high risk. In fact he said there were no apparent problems in the pregnancy. It was pointed out to him that these he testified to at length, especially the placental insufficiency testimony in court. He said his report was a summary, unlike testimony in court. He failed to alter what he said the plaintiff told him that he was allowed to push for 90 minutes when the records indicate that she was discouraged from pushing. He also did not correct the 90 minutes period for failure to monitor a tired foetus with CTG, even though the records indicate diagnosis of foetal distress at 08h56.

[41] However, he disagreed with the suggestion that there would have been no need to monitor foetal heart rate because irreversible brain damage had occurred at 09h00. He said it cannot be known if there is a damage until the baby is born. CTG, is always relevant for as long as the baby is still alive in the womb. The said monitoring has to be before, during and after a contraction as the heart rate varies from beat to beat. It can accelerate or decelerate. Similarly, the intervention of expedited delivery would always make a difference because it is never known what the extent of damage is, also to avoid further damage even if there had been a previous insult. He also did not alter his earlier opinion that episiotomy ought to have been done. He conceded

but said it was only done before 10. If earlier episiotomy was done and did not assist, then the doctor would decide what method to use to assist early delivery. Sister Mpisane at 08h30 recorded right occipital anterior, she knew the position of occiput. The moulding was zero. She could not say she could not identify occipital bones. Bearing down on its own cannot initiate foetal distress, unless there was also some form of foetal material circulation issue. A heart rate of 63 beats per minute and grade 3 meconium in Dr Hulley's opinion was indicative of serious foetal distress, nearly terminal because at 60 it is invariable terminal. If it is prolonged, it definitely causes devastating consequences to the foetal brain. He agreed that CPD can cause asphyxia and can occur in prolonged labour. However, he disputed that the plaintiff's labour was prolonged, there is also no basis to say the foetus had already suffered damage upon the plaintiff's arrival at the hospital.

[42] As for the condition of the baby upon discharge, he said he did not believe that the baby was well. The fact that there is no record of complete examination indicates that the baby was not sufficiently examined. He could not dispute that the plaintiff was advised to come back on 3 May 2011 and she never did.

[43] He said he has never seen caput 3 plus with no moulding. At page 36 of the medical record both caput moulding are indicated. At page 48 however caput is indicated as one plus and moulding as two plus. At pages 7,10 it is indicated as three plus. At page 11 there was an error indicated from zero to three plus and no moulding. At pages 13,14 it is indicated as nil. The recording of caput is not consistent in the various pages. At the end of the re-examination Dr Hulley explained why he said he questioned the authenticity of medical records. He questioned the baby's vigorous cry in the existence of irregular respiration. The time of rapture of membranes at page 12 is 08:56; at page 14 it is 08:45, urine, 800ml, at page 12 appears to be drained at 09h00. At pages 13 and 14 urine appears to have been drained at 08h30. Apgar scores at

pages 12,14 are $^{2}/_{10,}$ $^{7}/_{10}$ and $^{9}/_{10}$. At page 27 they are $^{2}/_{10}$, $^{5}/_{10}$ and $^{9}/_{10.}$ Dr Fateye is said to have been present but he did not make a single note on the record. There is no record of obstetrical problems during pregnancy and delivery on the Road to Health Chart.

[44] At the end of the plaintiff's case, an application was made on behalf of the defendant for the defendant to be absolved from the claim of the plaintiff in her personal capacity. That claim was instituted after it had prescribed. The cause of action arose on 25 April 2011 and the action was instituted on 30 May 2014, after the expiry of the statutory prescribed period of three years. This defence was raised but the plaintiff did not file a replication thereto. Even during the leading of evidence, the plaintiff did not answer the said defence. The application was not opposed. The plaintiff's claim in her personal capacity was dismissed with costs reserved.

[45] The defendant opened its case and called three witnesses, Dr Yatish Kara, Dr Shweni and Sister Mpisane. Dr Kara a paediatrician at St Augustine hospital, Durban commenced practice in 1995 to date. He had prepared medico-legal reports and gave evidence a number of times in courts before. In this matter he prepared two reports on 19 February 2005 and a supplementary report on 30 June 2015. He prepared the second report upon receipt of clear copies of a maternity case record. He said he had no knowledge of "umchamo wemfene". He heard that it is a non-harmful traditional medicine. He confirmed the contents of his report that foetal distress was present, resuscitation was done with bag and mask ventilation, adrenaline and naloxone. Suction of meconium was done. The doctor continued with episiotomy. It appeared that recovery was good as Apgar scores were $^{2}/_{10}$ at five minutes and $^{9}/_{10}$ at ten minutes. The baby was feeding at discharge therefore regarding the moderate to mild encephalopathy the baby had at birth; there is little evidence to suggest that it lasted for more than 24 hours. The baby recovered within 24 hours. At 10 minutes with Apgar of $^{9}/_{10}$, the baby was successfully

resuscitated, with mild encephalopathy, because it was not feeding well. At home the baby was sucking.

[46] It is possible but not probable that the encephalopathy was caused by an injury to foetus in the last hour prior to delivery. Dr Kara seemed to believe that after resuscitation the foetal heart accelerated to 120 at 09:10 which was not the case. He said the abnormality to foetal heart occurred somewhere between 08h30 and 08h56 when there was a deceleration of heart rate to 95, and within 15 minutes it had normalised. Fifteen minutes of bradycardia is not sudden and sustained which sudden and sustained bradycardia is required for a foetal bradycardia to be implicated in causing severe hypoxic ischemic injury.

[47] Dr Kara made reference to Prof Lotz opinion that S. had periventricular leukomalacia, injury which occurred when the baby was under 35 weeks gestation. Prof Andonikou also refers to the periventricular injury which occurred as a chronic evolution of a global insult to brain due to hypoxic ischemic injury of acute variety, most likely occurring at term. Dr Kara's opinion is favoured by Prof Lotz's radiologist report. After much debate it was agreed that reference to Prof Lotz's opinion must not be considered. The parties had agreed that the injury had occurred at term. However, it remained, in Dr Kara's opinion, that for the hospital medical staff to be found to be liable the negligence had to happen in the $1^{1}/_{2}$ hours the plaintiff was in hospital. When the plaintiff presented at hospital at 08h25 she was already 8cm dilated. She could not be transferred as birth, under ordinary circumstances, would occur in 2 hours.

[48] Dr Kara testified about ACOG criterion to determine if injury occurred in the intrapartum period. Regarding the first causes, unfortunately one of the tests that are required was not done, the blood gas at birth. The duration of encephalopathy did not seem to have lasted more than 24 hours. The type of

cerebral palsy, spastic quadriplegia fits in those that are caused by intrapartum injury. However, it was difficult to make out comments in the first criterion due to lack of information. The second criteria relates to softer factors, not suggesting intrapartum hypoxic injury. But if several factors are present, it makes such injury to be more probable. He took into account the fact that low Apgar score of $^{5}/_{10}$ at five minutes after birth was noted. However, it was $^{9}/_{10}$ at 10 minutes. Another factor was the presence of multi system organ failure, including abnormal heart function, abnormal respiratory function and abnormal renal function. According to him none of these were noted. S. was taken to the mother 3 to 4 hours after birth, S. could suck although it was noted that she could not feed well. The next criteria is the one of sentinel hypoxic event. There was no such history. He said he had already ruled out sudden and sustained bradycardia, based on his mistaken belief that the foetal heart rate did go up to 120 beats per minute at 09:10. He then concluded that none of supplementary criteria are satisfied in the present case. This doctor Kara said, in particular, that there was no abnormal respiratory function, despite the fact that he also said there was an indication that S. was breathing with a bit of an effort, sort of panting, a sign of respiratory distress.

[49] There was no marker to suggest that there was severe injury in the last hour of delivery. Even if there was, in his view, though the obstetrician would elaborate, little could have been done by then. There was no time for Caesar. If there was foetal distress, if at 9:10 the heart rate was 120, which was not so in reality, and the baby was delivered 50 minutes later. Episiotomy was only done at 09:30. They could do vacuum and forceps but the impression he had was that the head had not fully descended by 09:00 am which was not the case, he then said the medical staff could not pull the baby out. Dr Kara’s opinion that there was no time for caesar may be justified but for different reasons not the one he gave.

[50] In cross examination Dr Kara said, even if the question of recovery of foetal heart rate from 93 to 63, recovering to 120 at 09:10 or 10h00, did not occur, there was no sudden and sustained bradycardia lasting more than one hour. That is one of several requirements to allude to intrapartum hypoxia being a cause of cerebral palsy. It is one of the major determinants of whether the baby had hypoxic injury. If the foetal heart was persistently low, the baby ought to have been delivered quickly, he agreed with an obstetrician in that regard. If the foetal heart rate was relieved and foetal heart rate was back at 120, the urgency to deliver became less urgent. The foetal distress was managed according to the guidelines but what was not done was delivering immediately by vacuum extraction, if necessary, at 09h00 when the plaintiff was fully dilated. At paragraph 1.6 of Dr Hulley's report Dr Hulley recorded that the plaintiff told Dr Hulley that at 09:05 she was assessed by a doctor. There was some comment about intrapartum resuscitation. The plaintiff said the doctor came at 09h30, examined her, made her push and performed episiotomy. Regardless of what she said, in actual fact she only delivered at 10h00. Dr Kara agreed, sister Mpisane regarded the estimated date of delivery to be 10 April 2011. She never said she had issues with the plaintiff estimation of last menstrual date, but according to him that was incorrect for her to do. The last menstrual date was not even ticked, as required. If in the mind of sister Mpisane's he believed the date of delivery to be 10 April, she regarded it as post maturity and had to be on high alert against complications.

[51] It was pointed out to him that the record of onset of labour pains is inconsistent, at page 7 they started at 20h00 at page 11 at 01:00. He agreed that page 11 would have been completed before page 7 because page 7 is a record of what had happened. Page 11 is completed as it happens. At page 11, moulding and caput are circled as zero; subsequently error is written, then there is an alteration of caput as three plus. Membranes bulging and intact is recorded and then moulding is equal to zero. At page 14 caput is nil but could not read moulding. Dr Kara was not aware of a zero with a plus inside it. This

is what sister Mpisane explained as what she meant to do, to put a plus sign inside the zero, to indicate that moulding was one plus but instead she only put a dot. He refrained from answering obstetric questions but confirmed that caput and brain damage are not related and that an advanced midwife should be aware of that. At 8:30, page 13 foetal heart rate is 120, he said he could not see clearly but seems as if moulding is 2+ +. He agreed that something was not adding up in relation to record of caput. At page 7 heart rate is 120, but there is no time, his presumption is that it is just after 09:05 but at worst before 09:30, it appears there were instructions thereafter after the nurse carried them out, to report to the doctor. Episiotomy was performed at 09:30. It was pointed out to him that sister Mpisane said the heart rate was recorded at 08h32, which accords with notes at page 14, giving the time for 120 foetal heart rate as 08h30.

[52] The vacuum extraction ought to have been done if the head was low. Even though he has no knowledge of what could or could not be felt during the technicalities of vaginal examination. It would be difficult to get the head down when there is 800ml of urine. It did not make sense to leave that volume or urine from 08h30 of first examination to 09h00. Sister Mpisane said she waited until 09h00 to put a catheter, after the plaintiff could not urinate herself on the bedpan, however there is a record that the membranes raptured at 08:45, after drawing of 800ml urine. Sister Mpisane also testified that the membranes raptured at 08h45 after draining of the bladder. It turned out that at 08h30 Sister Mpisane knew where the head was, she could measure caput and moulding at 08h30.

[53] In the light of no foetal heart rate assessment after 9, Dr Kara said, that would affect his initial report but not change his opinion completely. He agreed that 63 foetal heart rate indicates danger and calls for management of an emergency situation. Sixty beats indicate foetus in dire situation and one would need to deliver immediately. If, it drops below 120 there would be

foetal distress, but with qualification. There was no CTG, but with CTG and a still patient, the measurement may be acceptable or with a feotoscope correctly used, before, during and after a contraction. Severe hypoxia develops within an hour or 45 to 46 minutes as Prof Smith timed it. When asked what would he make of a foetal heart rate that remained below 95 and varied between 95 and 63 for over an hour, he said that was why he doubted that, because over an hour, with that foetal heart rate, the baby would have come out in a fairly shocking condition. A baby who had such a catastrophic event would not be in a position to be taken to the mother after 4 hours. According to him Apgar score at one minute or at birth is not really taken into account when determining causality of cerebral palsy, personally he does not take Apgar scores terribly seriously.

[54] He agreed that foetal heart rate should have been measured every $2^{1}/_{2}$ minutes. He did not condone non-recording but it can happen that heart rate is measured regularly, but because staff is busy, they fail to record. It would take up to 30 seconds to lie a patient, if corporative, a minute to insert nasal prongs, five minutes or 10 minutes to put Foley's catheter, and few minutes now and again to monitor foetal heart rate from time to time ½ hourly according to the guidelines. There is no record of what was done from 09h00-10h00. The doctor would take charge upon arrival of such a situation, but there is no doctor's note. The plaintiff was in pain and was not given any pain killers to manage pain; so she would be uncooperative. There was caput 3, some action ought to have been taken but with no record, the conclusion is that there was no intervention.

[55] Dr Kara insisted that the fact that the baby needed no intensive care after delivery; except the sucking problem, that the baby was given to the mother, with everything else being acceptable, nothing suggests significant neonatal encephalopathy. S. would have been in a far worse condition if there was severe hypoxia, despite the fact that there is no record of intervention between

9h00 and 10h00. If foetal heart rate of 63 persisted, S. would not have responded but would have needed critical care, and would have had convulsions. In the circumstances, he could not causally link intrapartum event to cerebral palsy. He did not deny that there was an intrapartum event. There was no moderate to severe neonatal encephalopathy. S. was crying a few hours after delivery, cried a lot, actually. Moderate encephalopathy that meets the criteria has to last for 7 days, not just moderate encephalopathy he referred to in his supplementary report.

[56] It was important to monitor the baby after what S. had been through. Furthermore, after resuscitation it should have been admitted into nursery. It would possibly not be necessary to call a specialist but the baby should have been seen by someone. There may also not have been a need to refer the baby to a tertiary hospital if it had an Apgar score of $9_{/10}$ at 10 minutes. He could not say if S. wold have been healthier if delivered 40 to 50 minutes earlier.

[57] About the health of S. at the 11h00 examination, what was indicated as abnormal was sternal chest, an indication that the baby was breathing with a bit of effort, sort of panting a sign of respiratory distress; cry was absent; reflexes asymmetrical; grasp reflex and suck reflex weak. Again at 11h20 there was still poor sucking or sucking but swallowing reflexes were good. At 06h00 it was still not sucking well. He probably would not have discharged the baby in 24 hours. There were no obstetrical problems in pregnancy recorded in the discharge summary, they should have been highlighted. There is no information about how the baby was fed.

[58] Dr Kara agreed the baby had a major cardiopulmonary resuscitation. The criteria of sustained bradycardia lasting one hour or absence of foetal heart variability for more than 46 minutes satisfies one criterion for cerebral palsy. However, that has to be with the other 4 criterions. Forty six minutes of starved oxygen collectively with other facts can cause brain injury. There are

no records of other conditions, we need more of factors, the more of them present, the more likely it would be that the injury occurred in the intrapartum period. The possibility of injury during that period is there, but it is not known when it occurred, for how long it would have continued, over the period from 08h56-10h00. It could have happened at six or seven before she got to hospital.

[59] It may be clear that vacuum or forceps extraction during that hour should have been done, but there is no evidence that the outcome would have materially changed. The possibility or probability of hypoxic injury is one issue, it is necessary to tie it to being the cause of cerebral palsy which according to Dr Kara, to him did not seem to be so. He was not convinced that there was sufficient degree of neonatal encephalopathy to cause cerebral palsy. His opinion does not change even if the foetal heart rate did not recover to 120 after it had dropped. Whether she was postdate or not if 8cm regardless of what sister Mpisane believed that would not change anything, but that is more for obstetrician.

[60] Dr Shweni a specialist obstetrician and gynaecologist is an Eastern Cape Provincial Head of Districts Special Teams. He leads the teams of specialists who had been in the department of health as mentors in the districts in an attempt to improve the standards of health, in particular in relation to maternal deaths. He had prepared a report in the matter.

[61] He testified that he knows “umchamo wemfene” to be a herbal medicine used in the rural areas, with the belief that it has the effect of facilitating labour. It has an effect on smooth muscle, it exaggerates natural uterine contractions. It has an effect of making the bowel to contract as well, consequences of which result in the passage of meconium. In this instance grade 3 meconium was passed which was indicative of severe foetal distress, or because the patient had also taken herbal medicine. He had never separated fresh or old meconium and

would not know what test Prof Smith did to determine that the meconium was fresh. It is likely that at 08H30 when the plaintiff was assessed, meconium grade 3 was there already. He has no ability to say for how long it had been there when it was diagnosed at 08h56. The plaintiff had been in labour for some time, about 12hours.

[62] When the foetal distress was diagnosed at 08h56 she must have had the features, that is meconium before she came into the hospital. The meconium must have developed for sometime, that assumption being based on the fact that she had been in labour since the previous night at 20h00. After the plaintiff arrived she was assessed at 08h30, after that and up to 08h56 when the medical staff diagnosed foetal distress, they acted on it, as they were supposed to, in managing the patient. When reference is made to severe foetal distress without an indication of its duration, one cannot say that irreversible damage had not occurred. Even if instrumental delivery or caesarean section was done, it would not change irreversible damage, if it had already occurred.

[63] Forceps delivery would not be possible if the bladder was full the urine would keep the head high, also, membranes not raptured. It did not take long to have episiotomic delivery as soon as the bladder was emptied and membranes raptured, the head had descended. Also with vacuum extraction, if the head had descended and things that were holding it up were removed it would be better to let the patient deliver without instrumental assistance. With regard to placenta insufficiency it might be necessary to test for it if there was suspicion for it. Placenta insufficiency might not be obvious, if the foetal heart rate is at 120, it would mean that the baby is not affected. Also if the weight was within normal limits he thought it was 3.2 or 3.5kg, it would indicate that there was no significant effect on the baby. If the baby was post term there may be a need to terminate the pregnancy, after properly interrogating the dates of last menstrual period and signs of post maturity shown by CTG or ultra sound.

[64] Dr Shweni then commented about the plaintiff's allegations of grounds of negligence, as articulated in her particulars of claim. With regard to failure to recognise that the plaintiff was a high risk patient, he said if there was meconium and the heart rate showed problems, the medical personnel could make that assumption. There would be no point, in fact it would be irresponsible to transfer the plaintiff to a higher level facility hospital when she was already 8cm dilated. The allegation of failing to properly record four hourly or appropriate full maternal and foetal observation has no relevance herein. Shortly after arrival at 08h30 the plaintiff was assessed, foetal distress was diagnosed in less than 30 minutes at 08h56. Thereafter, the plaintiff's condition was appropriately managed after diagnosis of foetal distress. He therefore would not agree that the medical staff failed to regularly take proper and complete maternal observations when complications associated with foetal distress occurred; that they failed to properly diagnose condition and to treat it. It is not true that the plaintiff and her foetus were not properly or did not remain oxygenated. That the medical staff failed to properly manage the condition of the plaintiff and her foetus, was a broad complaint, according to him. He said he was not sure of the warning signs that it was alleged the medical staff failed to recognise, or appropriately react to but if the reference is made to meconium, it was dealt with accordingly.

[65] He said he could not explain what inappropriate modalities were implemented by the medical staff or those they failed to revise on the plaintiff and or her foetus. All they did was, according to him, appropriate. The plaintiff neither required special medical personnel, nor could she have been referred because there was no time. The midwife could appropriately handle the delivery. It was also immaterial that there was no CTG. A foetalscope was useful in measuring the foetal heart rate. The medical staff upon admission measured the foetal heart rate to have been 120 beats per minute, that was not indicative of a foetal distress, same could not be diagnosed at that

stage. In the light of the admission the plaintiff made, that she took "umchamo wemfene," it is possible that the foetus was damaged even before she came to hospital. It is not stated when she took "umchamo wemfene". The latent phase could have started up eight hours before her contractions became strong. Pain killers could be given to a patient who is in labour but after the obstruction caused by urine had been removed and the head descended, the effect of the medication could make the baby to suffer when given close to the time of delivery. He had never heard of a baby suffering cerebral palsy because the mother was not given pain killers.

[66] Under cross-examination he said Sister Mpisane would have the expertees to deliver with vacuum and forceps. The nurses ordinarily, would be comfortable with vacuum extraction and hardly forceps. Vacuum extraction requires certain conditions to be met, like, the person who applies it, should be absolutely sure of the anatomy, level of the head above the brim, should be no more than one fifth and the patient must have satisfactory contractions etc. He agreed that page 11, exhibit D, the maternal case record, labour initial assessment would normally be what would be completed first, and what most likely happened. However, he did not deal with such, so he would not be able to give a conclusive answer as to what actually happens practically which is usually influenced by the extent of panic and emergency of the prevailing situation. The atmosphere may lead to things happening in an illogical manner even to them, as doctors. Nonetheless, it would be reasonable that measurements and readings be recorded at the time they are taken. The timing of labour would also be found out then. Subsequently, page 7 would follow. This he said despite the fact that sister Mpisane had said she completed page 7 first because she started with doing the clinical notes with the assistance of another sister and later completed pages 11, 13, 14 of annexure D. When that was mentioned to him, he subsequently changed and said, it is logical to fill in page 7 before page 11. Page 7 has onset of labour since 20h00. At page 11, the labour initial assessment, the onset of labour is recorded as 01h00, so does

the reflection of the record at page 23, the duration of labour is recorded as nine hours, 01h00-09h00. The Portogram is completed at the labour ward.

[67] With regard to the failure to record the timing of the draining of urine, he said it is not unusual to miss out on recording the times for the similar reason that things could tend to be very hectic. It would not be normal to forget or to make a mistake about significant features like the presence of caput and moulding and abnormal temperature, blood pressure etc. Those, one would ordinarily want to record as accurately as possible, one may want to record them immediately or if one has good memory, one could still do it later. He was asked about what he could see as a record of moulding where there is an equal sign at the vaginal examination at the bottom of page 11. It was suggested that there was no plus inside the centre but a tail of a zero made by not lifting the pen, he said he saw a plus sign inside a circle. However, he said it looks like it was rubbed off or something did not print on what should have been the crossing on the vertical line. However, what would have been easy would have been to circle the plus sign and not write outside in bits and pieces.

[68] With regard to when S. sustained the injury which caused him to have cerebral palsy he stated that it could occur preterm but it is the MRI scan that is able to give the said indication. It was pointed to him that the admitted evidence of MRI scan indicate that the injury occurred at the end of 37$^{th}$ week to the 40$^{th}$ week. He said according to him term includes 36$^{th}$ week and is up to 42 weeks. The plaintiff spent about $1^{1}/_{2}$ hours in hospital. It was pointed out to him that what he stated is in conflict with Dr Kara's evidence who testified that he acknowledged that there was a sudden and a sustained bradycardia lasting an hour. When the heartbeat was dropping from 96 to 63 at 08h56, that led to moderate encephalopathy. Dr Shweni insisted that with an Apgar score of 9 at 10 minutes, that excludes hypoxic event in pregnancy having been the cause of cerebral palsy. He himself did not know what caused cerebral palsy.

[69] It was then put to him that according to evidence, when the plaintiff was admitted the foetal heart rate was 120 beats; grade 3 meconium was later diagnosed; there was bradycardia of 96 to 63; the baby was delivered after an hour with a low Apgar score; there was about 20 minutes resuscitation which involved bag and mask ventilation, cardiac massage and adrenaline; there was nasal suction of meconium; there was no cry at birth and there was slow or irregular crying at ten minutes and the baby was not suctioning. After that the baby was discharged and later she had cerebral palsy. According to submissions on behalf of the plaintiff, in the last hour of S. undergoing foetal distress, the more probability point to the fact that it was that period that led to the injury. With no further record of foetal heart rate, the only probable implication is that the foetal distress lasted for an hour. If nothing is recorded it is regarded as if nothing was done and the foetal distress continued. There is no record of it improving. Dr Fateye arrived at 09h05, he examined pelvis and was satisfied that plaintiff was ready to deliver vaginally, the cervix was fully dilated, according to sister Mpisane's report, but they did not deliver the plaintiff. It was pointed out to him that those were the facts, there was no room to introduce another proposition.

[70] He conceded that when there is bradycardia that calls for immediate and appropriate action on the part of medical staff. To re-enforce that, reference was made to the guidelines to maternity care at page 5, which directed that if vaginal delivery is imminent, deliver immediately by vacuum extraction, if necessary. He said he had no personal knowledge if the nurse explained the problem to the plaintiff as is required. However, nurses often fail to record their communication to patients even when it had happened. In the present case, there is no record of whether the situation was explained to the plaintiff. He also did not know to what extent did the fact that the plaintiff was uncooperative affect the delivery process.

[71] He was taken through the records. At ten minutes after birth, the baby's cry was recorded as 2 which indicates vigorous cry, having been altered to what was suggested to have been a 1. The ten minutes after birth could be 10h10 or 10h20. At 11h00 however the record indicates that there baby had no cry. He said he has limited neonatal knowledge, as an obstetrician they deliver babies and once they see that it is not well, having got that situation indicated by Apgar scores, they refer them to paediatricians, who take over the said babies. He therefore would defer questions relating to aftermath of babies to neonatologists. According to him S. was not left without necessary attention. From the time of admission to the time foetal distress was diagnosed, in that hour before birth, sufficient intervention was made, episiotomy was performed and the baby was delivered. An obstetrician looks after the mother and the neonatal nurse takes care of the baby.

[72] He said he did not know the whereabouts of Dr Fateye. In his view, he was not actively involved in the management of the plaintiff but sister Mpisane was. He did not try to locate Dr Fateye, He was then taken through of what happened from the time Dr Fateye arrived at 09h05. He then said Dr Fateye could have been called to testify on his finding of suitability for vaginal delivery. He was asked as to how much more time it would take to deliver a baby who has already been diagnosed to be in foetal distress by the time the doctor arrives. Even though he said it would depend on whether the mother is able to deliver, he conceded that the baby was to be delivered expeditiously. He considered the period of an hour not be unreasonably long, taking into account that the medical staff were also taking steps to manage the foetal distress, which according to him takes time. They also had to watch if the head was descending, after asking the plaintiff to push. It was pointed out to him that according to the records, at 09h05 Dr Fateye had ascertained that the plaintiff was ready to deliver vaginally and the presenting part was marked. After taking him step by step about what was done to the plaintiff, he had

difficulty in supporting a view contrary to the suggestion that, at most, all what was done to manage foetal distress could have been completed by 09h15

[73] He conceded that it is a probable conclusion that S. suffered foetal distress for over an hour which led to hypoxic ischemic injury and encephalopathy hence he has cerebral palsy. However, he said there are other possible conclusions. In his report he said there are other non-labour causes of meconium that had to be kept in mind, for example, the fact that the patient took herbal medication, like, umchamo wemfene which is known to produce meconium. Furthermore, the fact that it transpired that she was two (2) weeks post term. The meconium could have been there before she arrived at the hospital. Nevertheless, there is no reference to post term in his report. The medical reports refer to the plaintiff as having been 39 weeks as well. In fact the reality is that she was 2 weeks post term, which made the plaintiff a high risk. He said he was not aware of what was said by sister Mpisane, that, if meconium is passed in the womb, the foetal heart rate decreases. If there is meconium in the liquor, grade 3 the worst grade of meconium, purely that indicates foetal distress and decreased blood flow. In such circumstances everyone has to be concerned, that may generally cause a drop in the heart rate. Post term babies tend to pass meconium. An 8cm dilated patient should deliver in an hour or 2 and one has to ensure that same happens in that time. It was pointed out to him that at 08h30 the foetal heart rate was normal. Sister Mpisane recorded that she was satisfied with the health condition of the foetus but recorded, report to doctor to rule out possible foetal distress, which could have arisen because of caput 3, therefore there was no possibility of meconium in the womb. He agreed. He did not agree that the fact that, because meconium was only recorded at 08:56, 11 minutes after membranes raptured, that implies that because it is supposed to be seen when membranes rapture, it was not there 11 minutes earlier. He said it was incompatible that the heart rate could have been 120 at 08h30 and have meconium grade 3.

[74] It was pointed to him that, despite his evidence that umchamo wemfene influences the smooth muscles of uterine and bowel activity, that is not pointed out in his reports. Dr Kara also testified that it is generally not a harmful medicine. He said he himself had never investigated umchamo wemfene but he considers the views of others who investigated the issue and came to the conclusion that it might be one of the reasons S. had HIE. It was also pointed out to him that the government takes the medical negligence seriously to such an extent that a meeting was held in East London to look at the medical negligence occurrences, if it had a concern that umchamo wemfene causes HIE, extensive research would have gone into the issue of mchamo wemfene. . He said the research was ongoing, it was being done, despite the fact that, earlier, he had said it was done too many years ago

[75] When he was advised that sister Mpisane had said she could not expedite delivery because of caput 3, he said probably she wanted to exclude the possibility of obstructive labour, but he would not know for certain. He said when reference is made to the presenting part marked, the head has reached down to the perineum and an episiotomy is performed. Caput is not related to HIE. Caput happens over time, when the baby is adjusting itself so that it can navigate the birth canal. It is unlikely that there can be caput when the head has not descended, during the time it is still being obstructed by urine in the bladder. Full bladder can delay delivery that is why it has to be emptied. At 08:28 when plaintiff arrived she had 800ml of urine in her bladder. He was told that sister Mpisane said she found caput. He then said it depends on the length of time she was in labour, the head having been trying to get down and being obstructed. The pelvic bone is not at the bottom, compression of foetal skull is possible, caput three can form.

[76] With regard to the plaintiff being uncooperative, he said the record reveals that she was pushing prematurely despite being asked not to do so.

Same could only refer to the time period before 09:00, when she was not fully dilated. Upon being fully dilated she could push.

[77] It could take 10 to 15 minutes to set up a urine bag, drip, lie patient on left lateral and put nasal sprays. Drip was put up at 08h30 upon arrival. After 09:05 there is no record of what they did to the patient. Dr Fateye examined the plaintiff and was satisfied that she was ready to deliver vaginally. He agreed that from full dilation at 09:00, taking into account the 15 minutes estimation of preparing her, there is no record of what was done thereafter. That therefore shuts the debate about further things being done, up to the time S. was delivered From Dr Kara's evidence the plaintiff said that episiotomy was done at 09:30 but according to Dr Shweni it ought to have been done just before delivery.

[78] When the plaintiff was admitted, the summary of diagnosis and at the commencement of management at 08:30, the note state, "continue to monitor maternal vital signs, nothing wrong is contemplated in the foetus." If there was foetal distress detected and nothing was done about it, that would be grossly negligent, midwives at senior levels should be able to detect foetal distress. When pressed about whether the absence of a note about foetal distress indicated that none was diagnosed at that stage, he said at the stage of monitoring foetal and maternal vital signs, that is the stage it would be diagnosed if there was foetal distress or not. The diagnosis was not complete at that stage. Following that, the sister did further things like rapturing the membranes and found that there was mechanism which indicated that there was foetal distress, and noted it 15 minutes later. When working at labour wards they first determine whether the patient is in active phase, latent phase and then see whether there is foetal distress or not. He said that is the order. That was despite the fact that sister Mpisane had indicated in court that she had not diagnosed foetal distress, but she anticipated about its possibility in the future.

[79] He agreed that in the light of his evidence that the baby had problems before the mother came to hospital, it was a serious omission in his report not to note what the condition of the foetal was, according to the assessment at 08:30. He said at 08:30 the hospital staff just layed out what they were going to do. The actual initial assessment was when the membranes raptured. He said he did not consider it important to note in his report that no foetal vital signs were recorded after 08:56. The foetus was resuscitated and delivered. Monitoring is desirable but may not always be practically possible in the second stage of labour.

[80] He disagreed with the contention that that the fact that there was no record of foetal distress when the plaintiff arrived, that means there was no foetal distress. He said she was in labour for a long time, 5 to 10 hours and 8cm dilated, so if the labour was going to cause any problem, it had already caused such, not only upon arrival at hospital. There is every reason to say the foetal distress happened before she arrived at the hospital. Nothing in her handling at hospital could have caused foetal distress. If there was, it ought to have been picked up when membranes were raptured. Meconium could have happened earlier, it takes time to form.

[81] He said he would not know the basis of sister Mpisane saying at 08:32 she anticipated that foetal distress may happen but was not implying that there was foetal distress. He agreed that she did not make a diagnosis of foetal distress at 08:30. It would be negligent for her not to pick it up if it was there, instead anticipate it. The status of the foetal health cannot necessarily be determined on the basis of foetal heart only. As regards the cause of HIE he was adamant that its cause is not known, there is a lot of controversy about its causation.

[82] It was pointed out to him that in his report he stated that the plaintiff started bearing down at 09h45 whereas assessment 1 of medical records

indicate that it was at 08h56 that the plaintiff was bearing down. She was fully dilated at 09:00 in any event, therefore the basis of his report is incorrect. He said that the plaintiff delivered in fifteen minutes, which is acceptable. If she had been bearing down even earlier at 09h00 she should have been delivered because bearing down added more power to a foetus that was already in foetal distress.

[83] Sister Mpisane is a qualified midwife, she cares for pregnant women, delivers them and gives them neonatal care. In advanced midwifery she did extensive study about women with complications, she deals with difficult deliveries and resuscitates neonates. Since 2003 she delivered about 1 800 ordinary births and about 30 complicated ones. She works at Siphethu, which is a district hospital with a compliment of 3 doctors. Even in 2011 there were three doctors. She explained that a maternity case record is a document which contains details of a pregnant woman from pregnancy, through to delivery and after delivery.

[84] She confirmed that in the antenatal records the medical and general history of the plaintiff is recorded as healthy and with no abnormalities to the pregnancy. She said she wrote the notes on page 7 of the maternity case record as the plaintiff was narrating, responding to her questions. She insisted that the plaintiff had told her she started experiencing labour pains around 20h00. At page 11 she indicated onset of labour as $\pm$ 1 hour. The plaintiff had said she had been in labour for a long time. She said usually during interview, women always give the nearer time of onset of labour. When you explain the symptoms of labour they give the precise time and tell you when pains intensified. She indicated $\pm$ 01h00 for an accurate diagnosis. The plaintiff said she used umchamo wemfene. That concoction makes women to experience strong and severe contractions. Such contractions are against the natural course of things during labour. She will either give birth prematurely, if there is a delay, that will have consequences on the foetus. The blood in the

umbilical cord dries up, the foetus will pass meconium and the heart rate will drop. She has dealt with about 10 cases of women who used umchamo wemfene, before.

[85] She articulated the plan of how they were to monitor the progress of labour, they put up 1V line and discouraged the plaintiff from pushing prematurely, which the plaintiff had been doing even before she arrived at the hospital. This was indicated by caput 3. When the child goes down and hits against the cervix, that causes caput. She is able to anticipate what will happen next, which is foetal distress. The pelvic bones of the plaintiff were proportionate. She wrote that she needed to report to Dr Fateye possible foetal distress. Indeed she reported the whole condition when the doctor came. She could not report earlier because she could not find a doctor until some thirty minutes after she had assessed the patient. The CTG to monitor the foetus was not in working condition and they used a hand held doppler and a foetoscope, interchangeable. The heart rate was 120 heart beats per minute. The plaintiff was given a bedpan but could not urinate on her own. She was 8cm dilated.

[86] After 08:56 she drained 800ml urine from the plaintiff. She recorded that information at 09h00. A full bladder can be harmful of versico vaginal fiscal causing rapturing of the bladder when the head passes. That record is at page 12 of bundle D, clinical records under assessment.

[87] At page 11 she recorded moulding and encircled a block next to moulding PP. In the circle next to PP there is a zero in print, she wanted to record 1+ moulding, when it was clear that she could not do so visibly, she scratched and wrote on the side. She made a circle in order to make it clear to the clinicians that she was working with that, there was a 1+ moulding in a circle inside. However, the plus she intended to make inside the circle is not visible because the pen did not write but there is a small dot that indicates her attempt. She wrote error, in the whole circle that is bold under caput and

moulding. What is correct is what appears on the side, caput 3 + + + and moulding 1+. At page 13, the unclear lines indicated in graphic lines is not nil, it is +++ (3 pluses) and moulding there is scratched and written moulding 1+ (1 plus). She conceded that all she could have done would have been to circle 1+ along the provided block next to moulding as she said moulding was 1+. She said she intended to write moulding 1+, but ended up indicating with a dot in the circle which looked like a zero because pen did not write. At page 13 next to moulding she corrected error of zero and wrote 1+.

[88] The membranes raptured at 08h45 but she made the recording at 8:56 after she had satisfactorily observed the plaintiff and checked the flowing water, wherefrom she observed the presence of the meconium. She checked the heart rate when she was about to record, at 08:56. It was dropping at 95 to 63 beats per minute. She then explained that membranes raptured after the draining of the urine. Thereafter, there was diagnosis of foetal distress. Dr Fateye arrived at 09h05. They had an extensive discussion about delivery plan. The decision was that the plaintiff should deliver on her own vaginally.

[89] The vacuum extraction delivery was inappropriate because it is not allowed where there is presence of caput. Vacuum is like a cup that is put on the occiput. When the bones of occiput are not visible because the head is full of caput, vacuum cannot be used, that would be harmful because the cup will not cover the occiput, when there is caput. Their clinical judgment was that vacuum extraction was inappropriate. Forceps are also not allowed to a patient who is not co-operating. Midwifery book, volume 21 Pauline Sellers states thus: The relevant extract was admitted as exhibit A. Also, if a doctor or midwife cannot identify surgical suture and there is an overriding of the skull bone, forceps delivery cannot be used because that will add strain to the foetus, especially if there is caput 3. The foetus came already having a brain damage indicated by overriding of the skull bones and caput which are end result of prolonged labour. Prolonged labour has the impact being foetal distress. The

pressure of applying forceps in those conditions can cause severe physical and mental damage and even death. Their aim is to save the mother and the baby as dictated by provincial practice. Forceps would harm the mother.

[90] The plaintiff was uncooperative because she would sit without being allowed to do so. She would close her legs, remove the hands of the doctor or the midwife when they want to check the foetal heart rate. The CTG was not working, the numbers were not showing. It was properly maintained, they were waiting for technicians on that day. It would have been safe to use CTG to measure foetal distress. Foetal heart had to be assessed $^{1}/_{2}$ hourly before, during and after a contraction.

[91] It was recorded that with the witness's evidence, it was clarified that membranes raptured at 08:45 and not 08:56 as was previously put by the defendant's legal representatives and to other witnesses.

[92] She clarified that she was the one who dealt with the plaintiff, Dr Fateye assisted her. She as an advanced midwife was assisted by the doctor and not by the other sister because there was foetal distress. Then the plaintiff was given oxygen to assist uterine contraction and prevent postpartum haemorage.

[93] The Apgar scores at page 27 of the maternity record indicate that the child was born in an unstable condition. At first minute after birth it was given a score of $^{2}/_{10}$; the baby was then resuscitated and his condition improved to $^{5}/_{0}$ and ten minutes after birth it had improved to $^{9}/_{10.}$ It was noted that there was foetal distress. The baby was then assessed for encephalopathy. She got the impression that the baby had recovered and would be ready to be discharged the following day. S. would not be discharged in the usual six hours, as would be with those babies with higher scores at 1 minute and 5 minutes. As for a primivigravida with a baby with scores like the ones of S., they would first observe if the mother is able to feed the baby. If the condition of the baby is

not conclusive then they refer them to a tertiary institution, on the advice of the doctor of the neonate.

[94] The plaintiff looked well. The baby was given a BCG vaccine. The plaintiff was advised to attend for a postnatal visit on 5 May 2011 at Siphetu. She did not return. She was satisfied that the baby was well. She disagreed with the suggestion that the baby showed signs of encephalopathy. If that was so, the baby would have been referred to a tertiary hospital.

[95] She denied that the maternity record was ever falsified. She said she treated the plaintiff and the baby with care and expertise of as a midwife.

[96] Under cross-examination she said she remembered that she completed the information at page 7 of medical record at 08:32, standing above the plaintiff, she usually takes two minutes to complete page 7 before she completes the initial assessment. She did not write the time but she said she completed page 11 after completing page 7. At page 11 she transcribed what was already in page 7, in a more detailed manner. The assessment itself was at 08:30, that is why she recorded that time at page 11, but she completed page 11 at 08:34. She was under pressure to complete page 11, she was looking at a patient who had complications. I am not certain as to what complications were there at 08:34 because she had said she only recorded the foetal distress in its anticipation, because the patient had a prolonged labour and caput 3 plus, which she had felt when she was doing the vaginal examination. She measured caput 3 plus, before the membranes were raptured. She said she has advanced training to be able manipulate her fingers around without breaking the membranes. Even though at page 11, there is an alteration in the date from 26, in actual fact the altered record clearly reads as 25. She did not have the pleasure of time, she was looking after a patient even when completing page 11. It was pointed out to her that it was significant that it was page 7 that was completed without a mistake, whilst it was done when she was standing over

the patient and page 11 had many errors. She said if she had started with page 11 the whole document would be dirty. Page 7 is neat because the notes were written first.

[97] She agreed that the time of the onset of labour is important for both the mother and the baby because that would indicate if the labour is prolonged or not. It has to be accurately recorded in the initial assessment and clinical history at page 11. She agreed that the starting point in maternal case record is to first complete initial labour assessment, then follow with clinical notes but that depends on the circumstances.

[98] Pages 4,5,32,33 and 34 of maternity case record were completed at the clinic, they were handed to her when she first met the plaintiff. She completed pages 3 and 4 after delivery of the baby. Even though page 4 was replica of page 32 she repeated writing it, despite the fact that she could cross refer to page 32. She agreed that some information was omitted at page 32, like the estimated date of delivery. According to page 32 the expected date of delivery is 10 April 2011, whilst the last menstrual period was 3 July 2010, which is 15 days beyond term. She said that was important, it ought to have rang alarm bells. The plaintiff was a primigravida in pain, as the sister she had to be on guard. She did not give her anything for pain because in active phase of labour, painkillers affect the foetus, that is the policy. If she were to administer pethidine the baby would not be able to assist the mother, when she delivers. She disagreed with the proposition that analgesics can be given at any stage. It was pointed out to her that maternity guidelines at page 37, say so without qualification. Even pethidine, a 100ml IM with promethazine, 25ml IM four hourly, is acceptable in both the latent and active phases even up to full dilation of the cervix. Those would make her more cooperative. She said she would not administer those, where there is already foetal distress, that can kill the child, her experience as a midwife taught her so. Entonox is not available in Siphetu level of hospital. Narcan does reverse effects of pethidine in all cases.

[99] At all material times, even when the foetus had a heartbeat of 120 per minute, there was caput 3 plus, that indicated prolonged labour and which could result in foetal distress. Foetal distress could lead to cerebral palsy after a few days. The foetus was tired, that was indicated by foetal heart and grade 3 meconium. When advised that the ideal response is to restrict labour as far as possible under the said circumstances, she said one has to look at certain things when one wants to restrict labour.

[100] One Thousand millilitres of ringers lactate was administered to the plaintiff through IV line, in the absence of dextrose 5, because she appeared to be tired and there was foetal distress. This was after 08h56. After she had completed page 7 of maternity record, which took her about 5 minutes. She first spoke to Dr Obidikwe. His name appeared on the roster but in actual fact it was Dr Fateye who was on call. Dr Fateye was in the wards at that moment. She first presented the case to Dr Obidikwe but did not finish because he told her that he changed shifts, it was Dr Fateye who was on call. She found Dr Fateye doing rounds in the wards. The assessment of the plaintiff lasted about 10 minutes. Dr Fateye told her he would come to labour ward immediately. She had told him the urgency of the situation. She then completed page 11 afterwards, she was not able to estimate the time same took. He presented about the condition of the plaintiff to Dr Fateye on the phone and again personally. Upon his arrival at about 09:07, after about 15 minutes from the time of the phone call, he attended the patient whilst the oral report was made. He did not look at the witnesses' notes. When she spoke to the doctors the plaintiff's membranes had not raptured yet, same raptured at 08:45. She tried to get hold of doctor on call for 30 minutes from the time she realised she was faced with an emergency, first Dr Obidikwe then Dr Fateye.

[101] It was pointed out to her that her evidence about completion of pages 7 and 11, their timing thereof were a fabrication. After 08:30 when she

completed page 7, she had not diagnosed foetal distress which was only diagnosed at 08:56. However, page 7 contains record of IV line because the plaintiff was tired and there was foetal distress. She said she had realised that the plaintiff was tired. It was only a plan to put the IV line. The record at page 12 indicating foetal distress; heart rate dropping to 63 and informed Dr Fateye after 30 minutes of trying to get doctor on call, is so because when she spoke of the doctor on call, she referred to a second phone call she made to Dr Obidikwe. She agreed that she never referred to a second phone call before in her evidence. She said that was because she was never asked about it. It was also pointed out to her that she could not have spoken to Dr Obidikwe, 30 minutes before she made the entry at page 12. Earlier she had testified that she did the assessment after 08:30, which took 10 minutes. She phoned the doctors thereafter, after even completing page 7 which took about 2 minutes. She ought to have spoken to doctors around 08:40 or 08:45 or 08:46. That could not be 30 minutes before 08:56. She said the attempt to get hold of Dr Obidikwe can be estimated to have taken some 5 minutes. She did not struggle to get hold of Dr Fateye.

[102] She was pressed about the inconsistency of her evidence in relation to the issue of phone calls to the doctors; the fact that in her earlier evidence when she was asked, in her examination in chief, if she reported caput 3 to Dr Fateye, her reply having been that she told the doctor about the whole condition of the patient; that after assessment of the patient the doctor could not be found up until some 30 minutes and her latest evidence that she had no problem contacting the doctors, that after about 5 minutes of phoning Dr Obidikwe, he told him he was not on call she immediately got hold of Dr Fateye.

[103] She agreed that the summary of her evidence was correctly reflected in the Rule 36 notice as :

At 08h56 she diagnosed foetal distress and grade 3 meconium; she drained 800ml urine; the descending of presenting part i.e. head marked and membranes were raptured. In managing the foetal distress, she positioned the plaintiff on the left lateral lying on her side, supplied the plaintiff with oxygen and provided her Foley's Catheter to urinate with urine bag in a correct position; thereafter Dr Fateye came and examined the plaintiff; thereafter she confirmed that after 09h05, when Dr Fateye arrived, he did pelvic assessment and was satisfied that the cervix was fully dilated and the plaintiff was ready to deliver vaginally.

[104] She said even though there is no further recording beyond 09:05, i.e. as contained in page 23 of maternity case record, she did PV examination and the intrapartum resuscitation was done. When they record they summarise the record once and do not write every detail. Also, with the fact that the plaintiff was uncooperative, it is also recorded once at page 23, that is the space provided for that information. She therefore was not able to agree that nothing was done between 09h00 and 10h00.

[105] She agreed that S. was born with severe bradycardia; a heartbeat of around 60 beats per minute is considered as a severe condition, he needed aggressive resuscitation because he could not breathe; he had secondary apnoea and had problems eating and sucking hours, after birth. Therefore, S. was close to death and needed adrenalin, he cried a lot. She said, despite that he was successfully resuscitated and breathed. If a baby had a heart rate of 90 and survived after birth, that is a clear indication that everything was done to save that baby. They could not use oxytocin because of foetal distress, not even to hasten the strength of plaintiff's contractions. Resuscitation was all they could do. They did not expedite birth for an hour because there was nothing they had to do at that moment to help in the birth of the child.

[106] It was pointed out to her that the foetus was healthy at 08:30, its condition changed under her watch, that was not dealt with quickly enough and the baby was rendered spastic quadriplegic. She insisted that she also could not use forceps because the plaintiff's contractions were not strong enough. She said in the patogram at page 14, she indicated the contractions with black shaded squared area. She said if the contractions were strong enough she would have shaded area to be completely black, with no white areas. It was pointed out to her that the shaded area was more black. In the three examples of black squares on page 13, one is back, another has vertical stripes and last one has horizontal stripes. The black one is the one with strongest contractions, stating that they were greater than 40 seconds. When compared with the one shaded by her at page 14, hers resembles the one with strongest contractions greater than 40 seconds. She agreed but disputed that she was not truthful when she said the contractions were not strong enough for the plaintiff to push, when she was fully dilated at 09h00. At page 12, the contractions were 4 every 10 minutes. She agreed therefore that there was a contraction every 2.5 minutes. Also, at page 14, the duration of labour is recorded as 7 hours, which contradicts page 7, which recorded the said labour started at 20h00, which gives 14hours as duration of labour. At pages 11, 23, onset of labour is 01h00 to 09h00 hours.

[107] It was put to her that due to her personal involvement in the matter, the effect of allegations of negligence in treating the plaintiff on her emotions, it renders her not be independent or objective in dealing with existence or non-existence of negligence in this matter. She said she would still view the matter in the same way, no matter how far distant the issues were to her. She denied that the maternity case record was altered after it became apparent that there could be serious repercussions, in the matter where the plaintiff was attended at the hospital. When pointed out to her that uncooperativeness appears in the maternity record at page 23, after the baby was born with complications. She said the uncooperativeness is summary of labour, it had to appear after the baby

is born. It was further pointed out to her that the nature of the plaintiff's uncooperativeness that was referred to in her report was that plaintiff was pushing prematurely. It does not suggest that as a reason why she did not perform forceps delivery, but raised only in relation to vacuum extraction. She said in her career, she did 3 forceps deliveries and 8 vacuum deliveries, since she learnt then in 2009-2010. In 2011she performed 2 forceps deliveries and 4 vacuum deliveries.

[108] She disputed that it is not possible to have caput if there is no moulding. She could not agree or disagree with the contention that, whenever the moulding or caput appears in maternal case records and partogram, there are suspicious entries or changes. She agreed that in instances where there are those changes, initially the caput or moulding had initially been recorded as zero and then changed to a positive and not the other way round. She said the positives are the correct entries. She disagreed that the changes were ex post facto made. She also disagreed that umchamo wemfene was also introduced, ex post facto. She disputed that page 7 of maternal case record was written after 08:56 and most probably after the birth of the baby, as a measure to protect herself. It was pointed out to her that the record of foetal heart rate at 08h56 at page 12 was 95 to 63, noteworthy, the 3 of 63 was altered. Furthermore, after that there is no further record of foetal heart rate. She said after the dropping of foetal heart rate, resuscitation was done, to maintain the foetal heart, there was no time to record figures. The heart rate was monitored. Even though a lot is already catered for in page 12, including that the membranes raptured, Dr Fateye and the other sister were there with a young mother in distress and still there was no recording done. However, she still had time to write about positioning of the plaintiff, nasal prongs, catheter, urine bags, at 09h05. She even recorded late arrival of the doctor. She said she put the drip that the plaintiff had removed, she prepared the resuscitation trolley because they knew about the foetal distress and had to manage it. There was no need to record all of that. She said despite that, the baby was born alive.

[109] She was cross examined at length about what was under caput and moulding at pages 13 and 14. According to Sister Mpisane she wrote a vertical line and put a little cross, the cross would be seen by a person who asks. She could explain the scribbling. She was shown page 38 of Exhibit E which is an example of a portogram, with clear plus signs. In respect of boxes where pluses are intended, she said the example was not drawn in a hurry. Even with the comparison with clear pluses for caput in page 7, she said she had two minutes to write page 7, but she did not have that time when writing on pages 13 and 14. She was told that it was not believable that she said, the scribbling in pages 13 and 14 represented pluses, because further down on page 13, for protein, ketons, blood and glucose, she read similar scribbles as being NIL and not pluses. Even page 11, where she also said she completed in a hurry, all other areas were neat therein, except where she made alterations. Even the onset of labour was clear as 01h00.

[110] With regard to the record of examination of the baby at page 26, she said it was not written by the doctor, however it is the doctor who examined S.. Both she and the doctor examined S. but it is only her who wrote down, the doctor did not, even though he was supposed to have. She said she did her examination earlier than 11h00, immediately after birth, however she made the record at 11h00. The examination precedes the recording. It was suggested that for the next 23 hours the baby was in hospital, there was no further examination, she said it was because there was no need for the baby to be examined by the doctor. When it was pointed out that there was a problem, the baby was not sucking well at 23h32, she said feeding options were initiated successfully because under post-natal advice on discharge, there is a tick under the heading feeding options. According to her sucking problems had fallen away. The fact that feeding options were initiated successfully, even though not indicated what they were, to her that was proof that they used their best standards.

[111] Sister Mpisane was confronted with further inconsistencies in the form of omissions, contradictions or incoherences in her evidence and or statements that were contrary to indications of other expert witnesses. These included;

- that earlier in her evidence when she mentioned that the heart rate of 120 was heading towards foetal distress, she did not mention the presence of caput. She said it was probably because of the manner in which she was asked at that stage.

- that caput has no effect on foetal heart rate. She said caput +++ indicates prolonged labour which may lead to foetal distress.

- The dates at page 11 are referred to in months. 5FH is $^{38}/_{56}$ at page 7 and $^{38}/_{40}$ at page 11. She said at page 7 palpation is reported about what is gained when using hands over a woman's abdomen.

[112] Further with regard to whether she completed page 7 first, it was pointed out to her that in the 4 last lines of page 7 she neatly wrote caput +++ a few minutes before she wrote page 11. At page 11 in respect of caput and moulding she circled, she wrote error, underneath. The error is on the significant aspect of the case, she said an error occurred and she then circled on the correct part (on the block provided). It was pointed out to her that she circled 2++ (2 pluses) she conceded that she circled the wrong block but had put a 3 after block provided, she made an error in not circling the correct provided block.

[113] She insisted that she completed page 11 the starting point which is the initial assessment, after she completed page 7, because she was avoiding something. She agreed that her sequence was to get all information as to readings, pulse, temperature, age, onset of labour etc. upon the arrival of the

patient but did not write those on page 11, instead she first wrote page 7 before completing the said detailed information on page 11. She did not write the details of initial labour assessment where that is required most, as part of critical history. She first wrote page 7 so that she could save time so that she could present to the doctor. She wrote page 7 even though the doctor could just scan through pages 11,13,14 in order to know what was happening, page 7 does not have all that is recorded in those pages. Infact the full picture is on page 13. She said she could remember that the abdominal palpitation, which she recorded at page 11 and not on page 7, was $^{38}/_{40}$ because the plaintiff was her only patient at the time. The blood pressure, temperature, pulse and respiration was taken by another sister, she got their readings from that sister, when she needed to record them. The other sister kept a record aside in a piece of paper first and reminded her when she needed to present to the doctor. She kept figures and would be reminded if she forgot or there was something abnormal. She did not record the temperature at page 7 because there was nothing alarming about it. She also did not record the pulse of 82, at page 7, which she always remembered, because they only present issues that are abnormal to the doctor. She said page 7 only highlights dangerous things that had to be presented. When asked as to why she only testified about the keeping of a record kept by another sister in a piece of paper at that stage of her evidence, she said it was at that stage that it was asked. It was pointed out to her that, the said information was critical at the time she was asked if she had to remember the readings, she ought to have volunteered it.

[114] With regard to 800ml of urine, she said she measured it herself. It was not recorded at page 7 because when she presented to the doctor she had not yet inserted the catheter yet. When it was pointed out to her that the time of assessment at page 11 is indicated as 08:30 and there is a record of 800ml urine in the bladder, with same being contained at pages 13, 14 and in the partogram, which she would not have known at 08:30. She said at 08:30 the plaintiff could not urinate on her own. The urine was measured after 08:30, at page 12, she

recorded under 09h00 indication, 800ml drained descend of presenting part marked. Above that entry the time is recorded at 08:56. She did not remember the time she drained the urine but it was not at 09h00, it was after 08:30.

[115] She said she completed only the first portion of page 7 after 8:30, ending with initially was report Dr Fateye caput 3+ possible foetal distress can result. That was after 8:30 but she cannot be sure of the time. She could not write, examine and phone at the same time, she said she added the 800ml urine appearing on the last line after presentation to the doctor. She forgot to put the time of that entry or time of when she drained the urine. She wrote that so that everyone could see that the bladder was emptied. She said it may not be clear to a laymen why everywhere, (pages 7, 13 except page 12) she recorded that urine as at 08:30, she did so to show problems.

[116] She was asked to indicate if there was any additional information at page 7 which was not contained at pages 11,12,13,14. She indicated the additionals to be record of the use of "umchamo wemfene," caput 3 and that the mother was bearing down with each contraction-plan discouraged from bearing down. Signs of prolonged labour pains, anticipating foetal distress. Page 7 was written for two minutes in emergency. Prolonged birth is something else, the head appearing in birth canal. When it was suggested that she could have advised the doctor orally about "umchamo wemfene" she said "umchamo wemfene" was part of her report and she presented it in writing in the usual manner. She wrote page 7 on her feet to save time, still looking at the plaintiff. It was suggested that she could have avoided using vital time to write at page 7 what was already in pages 11,12,13. She said she was to report what was of concern to the doctor, hence she first recorded it at page 7. She ignored starting with page 11 which just required her to tick or write in prepared blocks and started with page 7 for quick presentation.

[117] Finally, it was pointed out to her that the failure to monitor or record the plaintiff's and foetal vital signs after 09h00 constituted gross negligence; she disagreed. She said she recorded her plan but she could not go back to record leaving the patient. Further, that after the diagnosis of foetal distress at 08:56; after the mother was fully dilated at 09h00, with the presenting part, the head, descending their failure to deliver by vacuum extraction or forceps as soon as possible constituted gross negligence, she disagreed. She disputed that there were no obstacles for delivery to be expedited immediately after 09h00.

[118] This constitutes the evidence presented in this case.

[119] The issues to be determined in this matter relate to whether the plaintiff succeeded to prove on a balance of probabilities that the medical personnel at Siphethu were negligent in managing and treating her when they attended her in the process of giving birth of S.. Further, whether the condition of S., that of cerebral palsy can be stated to be causally linked to the said negligent conduct, if any, of the medical personnel at Siphethu.

[120] With regard to the plaintiff her evidence differs with that of the witnesses for the defendant in relation to the time of the onset of labour, whether she used "umchamo wemfene," sister Mpisane's harshness to her, and that she and S. were examined upon discharge. I did not get the impression that she was not truthful with the court. As regards the time of the onset of labour I accept her evidence because it is supported by pages 11, 14 and 23 of the medical records. It is only at page 7 that it is written that labour started at 20h00. Page 7 is the page on which sister Mpisane said she summarised herself, in two minutes. Even though the plaintiff said they were not examined, when the court specifically asked her about contraceptives, she said she remembered that she was given contraceptives and S. was weighed and measured. Even though she said the baby was said to be tired upon arrival and later in cross examination she said the baby's foetal heart was checked long

after her arrival and said to be tired, her testimony that the baby was tired at some stage, is supported by the maternity case recordial. In as far as the evidence she gave in court, I accept her evidence. She denied taking "umchamo wemfene" she said she told the nurse that she did not use same for religious reasons, it is not clear at what stage and why that arose. Generally, she did not to present to be such a sophisticated person who would deliberately give calculated answers. I could also not make much of what seemed to be some differences in her evidence in court and what was said she told the experts in their consultations with her. She said she came back for review on 5 February 2011. She denied that she was uncooperative.

[121] As regards existence of negligence there are conflicting opinions presented by the various parties' experts. The guide in **Michael and Another v Linksfield Park Clinic (Pty) Ltd and Another** 2001 (3) SA 1184 (SCA) in case involving delictual claim for damages based on negligence is said to be most useful. It is for the court to determine the issues of reasonableness and negligence on the basis of often conflicting expert evidence. The court remarked that as a rule, "*that determination will not depend upon considerations of credibility but rather the examination of the opinions and the analysis of their essential reasoning, preparatory to the court's reaching its conclusion on the issues raised.*" In order to evaluate such evidence the court has "*to determine whether and to what extent opinions advanced are founded on logical reasoning.*" In civil proceedings the court asks where the balance of probabilities lies on a conspectus of the totality of the evidence.

[122] Prof Smith and Dr Hulley both agreed that the cause of cerebral palsy was unknown. In many cases, Prof Smith said, the risk factors that are commonly associated with cerebral palsy can be precipated by factors that occur before pregnancy, during labour, at birth and early neonatal period. The parties had already agreed in this case that the hypoxic ischaemic injury of acute profound variety, most likely occurred at term. It was also agreed that

HIE is formed during the period of 10 to 46 minutes. Prof Smith said meconium grade 3 can form in less than thirty minutes. Meconium is a likely marker of foetal distress. The meconium in S. was fresh, at 8h56, it had been there for less than an hour. It had not stained the skin or umbilical cord. Dr Hulley also said there was no record of meconium stain when membranes raptured. Injury had not occurred in 12 hours earlier when the plaintiff was in labour. The sentinel event was at 08:56 when foetal heart rate dropped to 63 beats per minute.

[123] As regards "umchamo wemfene" Dr Kara said he does not know the medication, however he and other experts agreed that it is known to stimulate the uterine contractions, it has an effect on smooth muscle of uterine activity. Even if I were to be benevolent and accept that the plaintiff had taken "umchamo wemfene", other than increased contractions, none of the experts associated it with being harmful. It was only Dr Shweni who said he himself never investigated the issue, but considers the views of others who did and came to the conclusion that it might be one of the reasons S. had HIE. He was not in a position to refer to the specific literature in that regard. Prof Smith said the effect of "umchamo wemfene" of making strong contractions can cause problem with the transfer of oxygen to the foetal brain, 30 per cent of women who take it do get meconium, however, none of that has been linked to developing encephalopathy. This statement by Prof Smith about problem with the transfer of oxygen has to viewed in the light of the common cause fact that at 08:30 the foetal heart rate was 120 beats per minute which was re-assuring. Prof Smith said he did not think the medical staff at Siphetu did anything wrong up to the time the foetal distress was diagnosed.

[124] At 08:30 when the cervix was 8cm the baby was expected to be delivered in two hours. He agreed that the reason for foetal distress is not clear. It could well be excessive contractions. Foetal distress and the presence of meconium indicate emergency. Caput has no significance in

asphyxia. Foetal distress resulted to asphyxia then to cerebral palsy. Foetal distress happened 10 to 15 minutes before diagnosis at 08:56. At 09:30 an uncompromised baby could still have been delivered had S. been delivered in 20 minutes. Forceps could be used even in the presence of caput. At 09h00 the cervix was fully dilated, the baby was ready to be born.

[125] In Prof Smith's view the criteria for intrapartum labour insult was satisfied in the circumstances of this case. The injury could have been prevented. Even though the extent is not known, there is room to manipulate encephalopathy in order to maximise better outcome. The fact that S. was not properly observed probably aggravated the primary intrapartum injury. Between 11:20 to 23:31 and 23:32 to 06h00 there are no neonatal notes. At 11:00 to 11:20 there were signs of early neonatal encephalopathy. There was a need for S. to be under intensive care. S. was given oxygen in unblended manner, that could injure the brain of a baby born in the state S. was in, even more. He said Dr Kara also recorded that S. appeared to have moderate encephalopathy, which is a doorway to cerebral palsy. He disagreed with Dr Kara that it did not last 7 days.

[126] Dr Hulley was also of the view that the foetal heart was not properly monitored. Foetal distress probably occurred at 08:41, 15 minutes before recordial. He did not know the absolute cause of hypoxia, probably it was placental insufficiency or lack of good blood placental blood flow. The placenta started to be compromised during the last 2 hours of labour. HIE was caused by prolonged period of abnormal foetal heart. Placental insufficiency has no bearing in the cause of HIE, foetal distress does. There was mismanagement of foetal distress during the second stage of labour, causation is immaterial. He had never seen caput without moulding. Dr Hulley said both the vacuum and forceps could be used. Urine could not have been drained at 09h00. There was no basis to conclude that the foetus was damaged before the plaintiff's arrival at hospital. Forceps could be used in the presence of

caput. There was no complete record showing that S. was sufficiently examined, there was no complete record of his condition at discharge. The APGAR scores are not coherent with reality of S. condition at birth. Despite the fact that he failed to alter his report upon receipt of clinical records, when the foetal heart rate dropped to 63, that was terminal. The labour was not expedited. Even though he failed to alter his opinion and in particular, gave credit to the medical staff for their efforts and performance upon receipt of medical records, whilst that was apparent, and testified at length about issues that were not covered in his report, which could attract criticism similar to that which is levelled against Dr Shweni, of being perceived not to be totally impartial, I find merit in his evidence that there is no record of what was done after 09:05 and delivery was not expedited when it ought to have. Therefore, the foetus was subjected to prolonged period of foetal distress.

[127] The defendants' experts held contrary views on the material aspects that are decisive in this case. Dr Kara was adamant that for the hospital to be liable the negligence on the plaintiff had to happen in the $1^{1}/_{2}$ hours whilst the plaintiff was in hospital, she arrived already 8cm dilated. A facility where ceasar could be performed was at a distance of 2 hours. Foetal distress was present. He doubted that foetal heart rate remained below 95 for over an hour, a baby with such catastrophic event would not be in a position to be taken to the mother after 4 hours, he would have been in a shocking condition and with convulsions. The fact that S. needed no intensive care after delivery, nothing suggests significant neonatal encelopathy. The ACOG criterion to determine if injury occurred in the intrapartum was not satisfied. The baby was feeding at birth therefore there is little evidence of moderate to mild encephalopathy that lasted longer than 24 hours. He could not link intrapartum event to cerebral palsy. It is possible but not probable that encephalopathy caused an injury in the last hour prior to delivery. Forty six minutes of starved oxygen needs to go with other factors to cause brain injury. The criteria of sudden and sustained bradycardia lasting one hour of absence of heart variability for more

than 46 minutes satisfies one criteria for cerebral palsy. Severe hypoxia develops within an hour or 45 minutes. Moderate encephalopathy that meets criteria has to last 7 days not just the fact that there was sufficient degree of neonatal encephalopathy to cause cerebral palsy. The possibility of injury intrapartum is there, but it is not known when it occurred for how long it would have continued over the period 08:56 to 10:00. It could have happened six or seven hours before the plaintiff go to hospital.

[128] I find merit in Prof Smith disagreement with Dr Kara that S.'s moderate encephalopathy did not last seven days. S. was discharged within 24 hours, he still did not feed well even though he was swallowing, he still was not sucking well. The improvement that could have or that had been achieved was not monitored in order to know that it did not evolve to stage 2 of encephalopathy.

[129] Dr Kara however made concession that seems to support the plaintiff's case that she was not adequately managed at Siphetu, in some aspects. He agreed that if foetal heart was persistently low, S. was supposed to have been delivered immediately. When the plaintiff was fully dilated at 09h00, S. ought to have been delivered. Episiotomy was only done at 09h30. It was incorrect for sister Mpisane not to tick the plaintiff's last menstrual date, also, if she regarded the expected date of delivery to be 10 April 2011, she ought to have noticed that the pregnancy was post maturity and be on high alert against complications. He agreed that the foetal heart was not measured every $2^{1/}_{2}$ minutes. The plaintiff was not given pain killers, that would indeed make her to be uncooperative. He said caput and brain injury are not related. In conclusion, however he maintained that even if vacuum or forceps extraction was done between 09:00 and 10h00 there is no evidence that the outcome would have materially changed. Hypoxic injury has to be tied to being the cause of cerebral palsy which to him did not seem to be so.

[130] Dr Shweni's opinion is that the medical staff at Siphetu did everything they were supposed to do. They managed foetal distress when it was diagnosed. He testified at length about his opinion that, it is likely that by the time foetal distress was diagnosed at 08:56, irreversible brain damage had already occurred, which damage would neither be changed by instrumental delivery or ceasar. Furthermore, that between 09h00 and 10h00 the medical staff could not have been sitting and watching the plaintiff, but they were working on her until S. was born. An Apgar score of $^{9}/_{10}$ at 10 minutes excludes hypoxic event in pregnancy being the cause of cerebral palsy. He was of the strong view that the injury could have been earlier than her arrival at hospital.

[131] Dr Shweni said it was a factor that could have affected the plaintiff's delivery process that she was uncooperative. He maintained this view even when he was told that, sister Mpisane explained that the plaintiff's being uncooperative was in relation to her bearing down inappropriately, during the period before she was fully dilated, before 09h00. She never testified that the plaintiff was doing more in being cooperative as Dr Shweni would have wanted the court to believe. About the delay in delivery he said once the bladder was emptied, membranes raptured, not long thereafter, episiotomic delivery was done. It was pointed out to him that those did to necessary follow in sequence and time as he simply outlined them. There was no clarity if bladder was emptied at 08;30 or 09:31. The membranes raptured at 08:45, episiotomy was done at 09:30 but S. was born at 10h00. He tried to put across that the medical staff was busy managing the foetal distress and monitoring the plaintiff in between. He eventually agreed, with plaintiff's counsel, correctly in my view, that from 09:05 when the doctor arrived and examined the plaintiff and found that she was ready to deliver vaginally, having been fully dilated, everything that is recorded, lying her on the left, emptied the bladder, put nasal spray, put drip with the IV line having been put much earlier, upon admission, that process could not take beyond 09:20 to do. Pertinent to me is also the fact that

episiotomy was done at 09:30, but still S. was delivered at 10h00. There is no account of what was being done from 09:20 to 09:30 or 09:35 up to 10h00. I am not persuaded by Dr Shweni's evidence that before any instrumental delivery, after Dr Fateye had ascertained that the plaintiff was ready to deliver, there was a further need to check if the head had descended and test placenta insufficiency. The record indicate that the descent of the presenting part had already been marked after the draining of the urine. I find no basis for him say a period of an hour to deliver the baby was not unreasonably long and the court has to take into account that the medical staff was still managing foetal distress, which process takes time. In the contrary the presence of foetal distress should have prompted the medical staff to act expeditiously and deliver S. at 09:20, at the latest.

[132] Dr Shweni said if it is likely that grade 3 meconium was already there at 08:30 when the plaintiff was assessed. He has no ability to know for how long it had been there when it was diagnosed at 08:56, he had never separated fresh or old meconium. He would not know what test Prof Smith did to determine that it was fresh. At 08:56, 11 minutes after membranes raptured, that does not imply that meconium was not there 11 minutes earlier. Prof Smith had explained that it had not stained the skin or umbilical cord when it was diagnosed, that was indicative of the fact that it had only been there for less than an hour. Furthermore, the foetal heart rate was reassuring at 08:30 and he agreed that the heart rate of 120 is incompatible with meconium grade 3.

[133] Dr Shweni's evidence was a bit inconsistent when it came to questions relating to the recordings in the maternity case record. I think the criticism levelled against him that he failed to make concessions when due, in that regard, was justified. He first testified that it was likely but not conclusive, because he is not working with those practically, to start with page 11 before page 7 when recording; page 11 labour initial assessment is transcription of information like measurements, it is reasonable to record as those things

happen, depending on the panic and the emergency of the situation. When he was advised that sister Mpisane said, she did the opposite, he said if a person has good memory he can first do a summary at page 7 and it is logical to go back to page 11 later. He, however, agreed with other experts in certain regards. He said it would not be normal to forget the existence of caput and moulding. Caput was not related to HIE. He said he did not know that meconium decreases heart rate as sister Mpisane suggested. If there is meconium in the liquor, grade 3 meconium that is purely indicative of foetal distress and decreased blood flow. Everyone has to be concerned. That may generally cause a drop in the heart rate.

[134] Quite late in his evidence, he conceded that it is a probable conclusion that S. suffered foetal distress for over an hour which led to hypoxic ischemic injury and encephalopathy, hence he has cerebral palsy, but there are other possible conclusions, non-labour causes. It had to be kept in mind that there was meconium, herbal medication is known to produce that. Furthermore, the fact that she was two weeks post term, which was not part of his initial opinion in any case. He said the plaintiff could have been given pain killers but he never heard that a child had cerebral palsy because the mother was not given pain killers. He was criticized for his rigid approach that as an obstetrician he looks after the mother and did not want to answer questions relating to nenatological questions. That the cry was altered from 1 to 2, 10 minutes after birth and again the baby was recorded to have no cry at 11h00. He said if Apgar scores indicated that the baby is not well they refer them to paediatricians to take care of the baby. I am of the view that Dr Shweni could have answered the inconsistency in the record regarding a cry earlier and later no cry, however, I also understand his approach that he did not want to go beyond his area of expertees, which is what is expected from witnesses of his stature. I agree he ought to have interviewed sister Mpisane to get more insight to inform his submissions.

[135] Overall I am unable to find that he was not objective. He is an employee of the department of health, he wrote his report in its letterhead. His testimony was long, with a number of days facing robust cross examination, I would not conclude that he was evasive, I would rather say he tended to be repetitive and gave long in his answers. I would not find anything wrong in his use of the department's letter head. He did make statements that agreed with plaintiff's experts, like he said the medical personnel could make an assumption that the plaintiff was a high risk patient when they recognised the presence of meconium and problems in heart rate. All experts said the medical staff could not transfer a patient who was 8cm dilated, the foetal distress was managed accordingly. Dr Shweni found no relevance of the allegation of failure to record foetal observation at every 4 hours in the light of assessment at 08:30, 08:56 and management of foetal distress. He said the plaintiff was properly oxygenated. I do however, find his evidence to be assailable with regard to his assumptions, without record, that the medical staff did continue to attend the plaintiff after the last record at 09:05. Also, I find that he could not support his suggestion that the S. had likely suffered irreversible damage at 08:56 when foetal distress was diagnosed at 08:56. I would take the assertion about the onset of injury only to the extent that the possibility of injury intrapartum does not make it to be known when the injury actually occurred.

[136] Sister Mpisane is one witness who ought to have assisted the court in understanding what took place with regard to the plaintiff's management at Siphetu. Her evidence did not go near to achieving that. She kept changing and she gave explanations much later, only after extensive probing, about issues she had already testified about, strenuously trying to justify earlier answers.

[137] It was problematic that she changed entries relating to caput and moulding from zero to 3 plus and 1+ respectively. At page 11 there were two alterations and two in the partogram. Significantly, there is none at page 7, which according to her, was written whilst he was standing over the patient. I

do not find her explanation about page 13 of bundle D that she tried to write moulding 1+ but the pen did not write to be persuasive. Moulding at page 13, in print, remained equal to zero on the side, she said she meant to put 1+ inside. She said it is possible to have caput and no moulding, this even Dr Shweni said he had never seen. It is also difficult to accept what she said that she completed page 7 before she completed page 11. In order to complete the details like measurements at page 11, she had to memorise or ask for information from another nurse. Again much later she had to go back to page 7 to make an entry about urine later. She also recorded the onset of labour at pages 11 as ± 1 hours, and as page 7 at 20h00. She said during interview patients tend to give nearer time of onset of labour. If that were so, ± 1 hours should have been at page 7, the page she said she wrote whilst over the patient. Otherwise she ought to have completed page 11 first, moreso that, she conceded that page 11 was the starting point in maternal case record followed by clinical notes, but sought to qualify it by adding, depending on the circumstances. Furthermore, there is no indication of time at page 7 whilst at page 11 there is a time record of 08:30.

[138] I am unable to agree with sister Mpisane that the unclear lines at page 13 are not nil but +++. That scribbling is similar to the areas she confirmed indicate nil in the same page for protein, ketones, blood and glucose.

[139] I also failed to follow her evidence with regard to the time she made the report about the plaintiff's condition to Dr Fateye on the phone or orally. Similarly, as to Dr Obidikwe. She first said she presented to Dr Obidikwe 30 minutes of trying to get the doctor on call. She could not finish because Dr Obidikwe told her it was Dr Fateye who was on call. She found Dr Fateye without struggling, he told him of the plaintiff's condition and he said he would come immediately. That was before she completed page 11 and the membranes were raptured. Dr Fateye arrived after 15 minutes at 09:07 and she made the oral report. When questioned about how she could have completed

pages 7 and 11 and refer to foetal distress before 08:56 and putting an 1V line, she said she had realised that the plaintiff was tired and anticipated foetal distress. She recorded the 1V line as a plan of what she would do. Her record at page 12 indicating foetal distress; heart rate dropping to 63 and informed Dr Fateye after 30 minutes of trying to get doctor on call, she was referring to a second phone call she made to Dr Obidikwe. This is difficult to contend with because Dr Obidikwe had already told her he was not the doctor on call, and this second call came in much later in her evidence, way into her cross examination.

[140] She also added in cross examination about more ways in which the plaintiff's being uncooperative, that the plaintiff was closing her legs, sitting when not allowed and removing the hands of the medical staff when trying to monitor the foetal heart. All this was not referred to in the clinical notes, wherein reference is only made to premature bearing down.

[141] Her evidence differed from the rest of the experts with regard to instrumental delivery. Firstly, she said vacuum extraction is not appropriate when there is caput. Other experts said, even though forceps would have been preferable in the presence of caput, vacuum could be used. She submitted authority, exhibit A which indicated against using forceps when the patient is not cooperating and against vacuum when there is caput, if surgical suture could not be identified and there is overriding of the skull bone. Furthermore, she said the contractions were too weak for forceps. Her shading of the block for strongest contractions at page 13 of bundle D did not support her contention that the contractions were weak for forceps delivery. She unsuccessfully tried to explain the difference in the plaintiff's type of contractions. As for uncooperativeness, her recording shows that it only refers to the time before the plaintiff was fully dilated. In spite of all this she said she appreciated the emergency of the situation when the heart rate dropped to 63 beats per minute. Clearly foeceps could be used, because if uncooperativeness refer to bearing

down, which the records suggest, that was at the appropriate time because the plaintiff was bearing down after she was fully dilated.

[142] She maintained despite the indication to the contrary in the guidelines, that she did not give the plaintiff painkillers because the policy states that a patient in active phase is not supposed to be given painkillers. Even Dr Shweni said painkillers can be given to patients in that state.

[143] She was criticized of being defensive and lacking objectivity because of her personal involvement in the matter, in relation to the plaintiff's treatment. She defended herself when a personal attack was directed at her that she allowed a foetus that was healthy at 08:30 to deteriorate under her watch and end up being quadriplegic. Sister Mpisane was justified in defending herself there because criticism was directed at her personally when it is on record that she did intervene and managed foetal distress upon its being diagnosed. Even if I were to accept that she believed she could not use forceps because the plaintiff was uncooperative. Her belief that she could not give pain killers to the plaintiff because she was in active phase, failed her. Had she dealt with the plaintiff's uncooperativeness, by relieving pain she would have expedited delivery with forceps. I find no fault in her judgment not to use vacuum. I also accept that if Apgar of at 10 minutes is anything to go by, indeed she may have harboured the belief that the baby had recovered and ready to be discharged. However, the same baby is said to have had no cry an hour after birth. Then that state of affairs shakes the Apgar score ground.

[144] In as far as her evidence is concerned I have to agree that in aspects where it is disputed I find no basis to prefer her version and accept it as probable. There were a lot of problems in her evidence as highlighted above.

[145] In the light of my analysis above, I am able to find that the plaintiff proved on a balance of probabilities that the nursing staff at Siphethu were negligent in the management of her labour.

[146] Having said so, I still need to make a determination as to whether there is a causal link in the said negligence and S.'s condition.

[147] Causation is required for delict liability to arise. There must be a causal nexus between the conduct and the damage. A causal nexus is a question of fact which is answered in the light of evidence and relevant probabilities. In order to determine whether factual causal nexus exists, the point of departure has always been the use of *conditio sine qua non* theory. Firstly, if a factual causal chain or link exists between the act and the damage there is factual causation. The next point is to determine which harmful consequences actually caused by the wrongdoer's act he should be liable for.

[148] In the case of an omission the *condition sine qua non* requires that a hypothetical positive act be inserted in the particular set of facts, probably also regarded as removal of the defendant's omission. If hypothetical positive conduct of the defendant could have prevented the damage, it can be said the defendant's omission caused the damage. The court must in general determine what the wrongdoer could have done in the circumstances to prevent the relevant consequence

[149] With regard to factual causation, in **Minister of Safety and Security v Van Duivenboden** 2002 (6) SA 431 at 449 E Nugent J had this to say:
"*a plaintiff is not required to establish causal link with certainty, but only to establish that the wrongful conduct was probably a cause of loss, which calls for a sensible retrospective analysis of what would probably have occurred, based upon the evidence and what can be expected to occur in the ordinary course of human affairs rather than an exercise in metaphy sics.*" It also

usually suffices for purposes of factual causation to establish that the defendant's conduct has in anyway contributed to the plaintiff's damage.

[150] In most delictual cases the injury for which the wrongdoer is to be held liable clearly falls within the limits of his liability, imputability of harm on the defendant is usually evident. Its determination need not be made expressly. In **S v Mokgethi** 1990 (1) SA 32(A) the flexible approach to legal causation was suggested by the Appellate Division. It was held that, there is no single and general criterion for legal causation which is applicable in all instances. The basic question is whether there is a close enough relationship between the wrongdoer's conduct and its consequence for such consequence to be imputed to the wrongdoer in view of policy considerations based on reasonableness, fairness and justice. Van Heerden JA concluded criteria (for legal causation) seem to be significantly more exact than a criterion (the flexible criterion) according to which the court determines whether a sufficiently close link exists between an act and a consequence with reference to policy considerations. That is not to say that one, or even more than one of the criteria may not be employed on a subsidiary level in application of the flexible criterion to a specific type of factual causation; but merely that none of the criteria can be used (exclusively as a more concrete measure of limitation) in all types of factual situations and for the purpose of any form of legal liability.

[151] In **Lee v Minister of Correctional Services** 2013 (2) SA 144CC at 168 it was held :

> *"[56] what is required is postulating hypothectual lawful, non-negligent conduct, not actual proof of that conduct. The law recognises science in requiring proof of factual causation of harm before liability for that harm is legally imposed on a defendant, but the method of proof in a court room is not a method of scientific proof, the law does not require proof equivalent to a control sample in a scientific investigation*

> *"[57] Postulating hypothetical lawful, non-negligent conduct on the part of the defendant is thus a mental exercise in order to evaluate whether probable factual causation has been shown on evidence presented to court I accept that postulate must be grounded. On the facts of the case, but that is not the same as saying there is a burden on the plaintiff to adduce specific evidence in relation thereto".*

[152] The defendant contends that at 08:56 when foetal distress was diagnosed, irreversible damage had already occurred. According to Dr Kara it is possible but not probable that mild encephalopathy at birth was caused by an injury in the last hour prior to delivery. The criteria of sudden sustained brodicardia lasting one hour satisfies only one criteria of cerebral palsy. According to him, even if birth was expedited to occur at 09h00 or shortly thereafter, there is no evidence suggesting that the outcome would have materially changed. Hypoxic injury has to be tied to being the cause of cerebral palsy, which could not be said in the present case. The defendant submits that the plaintiff failed to prove that failure of the nurses to carry out instrumental delivery caused S.'s cerebral palsy. There is no evidence to prove that at 08h56 the foetus had not been irreversibly damaged by HIE. Instrumental delivery after 09h00 would have been of no consequence. Prof Smith also said there is no certainty that post-delivery intervention would have or had reversed HIE or what improvement it would have on the baby. The defendant submit that in the alternative HIE occurred at between 08:30 and 08:56. The plaintiff disagrees with the above contention, her experts contend that injury had not occurred 12 hours earlier when she was in labour. The sentinel event happened at 08:56 when the foetal heart dropped to 63 beats per minute. The plaintiff was allowed to deliver normally an hour after she was fully dilated, notwithstanding the diagnosis of foetal distress. There was no record of vital signs of the mother or the foetus in that hour, the guidelines provide that when managing foetal distress, if vaginal delivery is imminent, the

baby has to be delivered immediately, by vacuum extraction if necessary. All experts disagree with sister Mpisane that instrumental delivery could not be done in the presence of caput.

[153] HIE forms during the period 10 to 46 minutes. At 08:30 the heart rate was 120 beats per minute. Even if foetal distress started 10 minutes thereafter, at 8:40, up to 8:56 that would be 16 minutes at 09:00 or 09:05 when doctor arrived there would be 20 to 25 minutes of foetal distress. With proper measures of management of foetal distress as it was done, and delivery by 09:12 (allowing fifteen minutes, which timing was also conceded to by Dr Shweni, to put measures of managing foetal distress from 08:56), the foetus' misery would have ended in 32 minutes. S. was born at 10h00. From 08:40-10:00 he would have suffered 80 minutes of foetal distress. Both Prof Smith and Dr Kara say with 80 minutes of starved oxygen S.'s condition would, have been worse. In my view when foetal distress was diagnosed at 08:56 it is not likely that the foetus had been irreversible damaged by HIE. Foetal heart rate had not reached 60 or less which is terminal bradycardia. When membranes raptured at 08:45, there is no record of meconium stain, until 08:56. Expidated delivery would avoid the possibility of a second injury. With constant monitoring before, during and after a contraction, heart variability would have been known and continuously managed. All experts agree that foetal distress has a bearing on HIE. HIE is a doorway to encephalopathy and later cerebral palsy. In my view Prof Smith's opinion that the presence of encephalopathy at birth, (no cry, respiratory distress, asymmetrical reflexes, need for major resuscitation) and the admitted radiologist report establishes the plaintiff's case on a balance of probabilities, unlike the speculation by Dr Shweni and what Dr Kara said in support of his view that the intrapartum event cannot be linked to cerebral palsy. Dr Kara's reasoning seemed to support his proposal by saying more was needed to satisfy the criteria than 46 minutes of starved oxygen to cause brain injury and to conclude that the injury occurred intrapartum. Even if it did it is not known for how long it had been there or it had lasted.

[154] The baby was not monitored up to 7 or 10 days. It cannot be said the moderate encephalopathy subsided at any stage S. was discharged in 24 hours. Dr Kara said blood gas was not done. There was no record of increased heart rate after resuscitation. I also have doubts of how a sick baby like S. could have been taken to the mother, the medical records do not assist me in this regard. An hour after birth, with resuscitation, S. still had no cry. The situation is worsened in by sister Mpisane's account of events. Dr Kara acknowledged that S. had moderate encephalopathy. It was also possible that, with the fact that S. needed pulmonary resuscitation, therefore the encephalopathy was sufficient to cause cerebral palsy.

[155] More needed to be done for S. after birth. Even if he was compromised at birth, had he been properly monitored, he would have received adequate treatment and care at intensive care unit or tertiary institution for mild encephalopathy in order to have an improved result and avoid the probability of a secondary injury. He was given unblended oxygen which could injure him even more.

[156] In all probabilities the medical staff's failures as articulated above indicate that they acted negligently. Even if I am to consider that sister Mpisane test of negligence to be applied is that of a reasonable advanced midwife, I am unable to excuse the failure to monitor foetal heart before, during and after contraction; the failure to administer drugs to manage contractions; the failure to record what she did between 09h05 and 10h00 or 09:20, after the benevolent assumption that she was managing the foetal distress for 15 minutes; failure to deliver around 09:20; why S. was not kept in intensive care or referred to a tertiary institution; why he was discharged in 24 hours. As for after Dr Fateye arrived why the birth was not expedited. Sister Mpisane, incorrectly so, thought that she could not use forceps, Dr Fateye ought to have given guidance in this regard. Furthermore, the admitted MR1

report indicates no other explanation for the injury other than hypoxic ischemia. The defendants' experts proposition of any other cause for S.'s condition on the other hand was not persuasive. The negligence of the medical staff in my view contributed a great deal in S.'s condition, both before birth and at neonatal stages.

[157] As a consequence thereof, had they acted otherwise, even though the extent to which a better outcome could be maximised is not known, most factors that are identified as having worsened S.'s condition, would have been excluded. The omission by medical staff is in my view closely connected to what ultimately became the worse outcome in S.'s condition. Restriction of time of labour after 09h00 in the presence of foetal distress ought to have been prioritised.

**COSTS OF THE APPLICATION TO RE-OPEN THE PLAINTIFF'S CASE**

[158] During the defendant's case and during the cross examination of Dr Kara, he made reference to radiologist's report, Dr Lotz to support some aspects as forming basis of his opinion. There was no rule 36 (9)(*a*) and (*b*) notice notifying the plaintiff that the defendant would rely on the report. However, no issue was taken at the stage of Dr Kara's evidence that the plaintiff was challenging the reference to that report.

[159] When Dr Shweni who had interposed to accommodate Dr Kara was back in the witness box, he also wanted to rely on Dr Lotz's report in some aspects. The plaintiff cried foul at this stage about the unprocedurally manner in which the report was being introduced. The court was of the view that Dr Shweni could answer questions relating to this report, provisionally, especially in the light of the fact that Dr Kara had done so already. Thereafter, the

plaintiff could address the court at a later stage as to why regard should not be given to that report.

[160] The plaintiff then made an application to reopen her case. In her view, the said report had not arisen at any stage during the time she presented her case. The matter had proceeded on the basis Prof Andronikou's admitted report. She was of the view that her experts needed to address this aspect in evidence. That was the basis of the application.

[161] The defendant abandoned the idea of reliance to this report and closed her case. The need for the plaintiff's application then fell away and the application was withdrawn and costs were reversed.

[162] I agree with the plaintiff's counsel that the late introduction of the report necessitated that the plaintiff consider dealing with the issues arising in the report in evidence.

[163] In my view, this withdrawal of the application is not one of those where it has to be accompanied by a tender of costs. The court in its discretion has to look at why it was necessary in the first place that the application had to be brought and then later not be proceeded with. The circumstances leading to that state of affairs fall squarely on the doorstep of the defendant. An appropriate costs order therefore would be that the defendant pays the costs of the interlocutory application.

[164] As regards costs of absolution of the plaintiff's claim in her personal capacity, I find no reason why costs should not follow the result.

In the result :

1. The defendant is hereby ordered to pay to the plaintiff such damages in her representative capacity as the mother of S. as she may prove or agreed upon.

2. The defendant is ordered to pay the plaintiff's costs of suit in her representative capacity, such costs to include qualifying expenses of expert witnesses in respect of which Rule 36(9)(*a*) and (*b*) notices had been issued and their travel and accommodation costs.

3. The plaintiffs claim in her personal capacity is hereby absolved with costs.

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**B Majiki**

**Judge of the High Court**

Counsel for the plaintiff : Mr Dugmore SC

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