## IN THE HIGH COURT OF SOUTH AFRICA

### EASTERN CAPE LOCAL DIVISION PORT ELIZABETH

CASE NO: 132/2015

#### **DATE HEARD: 13/04/21**

DATE DELIVERED: 31/08/21

## IN THE MATTER BETWEEN:

VN on behalf of PN

PLAINTIFF

And

# THE MEMBER OF THE EXECUTIVE COUNCIL FOR DEFENDANT HEALTH & SOCIAL DEVELOPMENT OF THE

EASTERN CAPE

JUDGMENT

VAN ZYL DJP:

This is a medical negligence case arising from a birth injury. The plaintiff [1] gave birth to PN at the Dora Nginza Hospital ("the hospital") situated in Port Elizabeth during October 2009. PN sustained a permanent brain injury during delivery. The plaintiff instituted an action in this Court against the Member of the Executive Council for Health and Social Development of the Eastern Cape on behalf of PN for damages arising from the allegedly negligent conduct of the employees of the defendant at the hospital. The defendant accepted vicarious liability for the actions of the midwifery staff at the hospital. In accordance with Uniform Rule 33 (4), the issues of negligence and causality were separated from the remaining issues in dispute. Put differently, the issue of liability was limited to whether or not the midwives acted negligently, and whether that negligent conduct, if so established, caused PN to sustain the brain injury.

[2] The injury sustained by PN during childbirth (intrapartum) was diagnosed as hypoxic-ischemic encephalopathy due to oxygen deprivation. The injury has caused her to develop cerebral palsy. The exact nature of the brain injury is not in dispute. Its features are in keeping with what is known as an acute profound (near-total) hypoxia insult. It is consistent with her MRI brain scan that shows, what has been described as, a "classic diagnostic features of an acute profound hypoxic injury of a term brain in a chronic stage of evolution". It is further consistent with PN's condition immediately after birth. The clinical notes of the midwife show that PN exhibited signs of neurological impairment immediately after birth, in that she required intensive resuscitation in order to sustain both respiratory and cardiac function, and had a depressed tone. The indications at birth of PN having sustained a brain injury will be discussed in more detail when I deal with what has been alleged to be negligent conduct by the midwives following the birth of PN (postpartum).

[3] With regard to the nature of, and the mechanism for the injury that PN suffered, it is common cause that she sustained, what is known as an acute profound hypoxic ischemic brain injury during the second stage of labour. This type of insult is evidenced by the pattern of the injury to the brain. It presents itself in a primarily central pattern of injury involving the deep grey matter of the brain. It is a severe

injury that is caused by the almost complete interruption of the oxygen in the blood supply, and of the oxygen levels in the tissue. The expert witnesses agreed that an acute profound hypoxic-ischaemic injury usually takes place in a short period of time, and that it progresses rapidly. The witnesses were further in agreement that the almost complete disruption of the blood supply and oxygen to the brain of PN must have endured for a minimum period of ten minutes, up to a maximum of forty five minutes, although these estimates were based on experiments carried out on animals and cannot be measured very accurately.

[4] An intrapartum acute profound hypoxial insult may be caused by sentinel events, which is defined as any unanticipated event that results in death or serious physical injury that is not related to the natural cause expected. Examples of possible intrapartum sentinel events are a ruptured uterus; a separation of the placenta before the delivery of the foetus; a prolapse of the umbilical cord; foetal-internal haemorrhage; and maternal shock during labour. The list is not exhaustive.

This injury must be distinguished from an insult that develops over time. It [5] is known as a partially prolonged hypoxic-ischaemic injury. An insult of this nature results in a different pattern of injury. The auto regulatory mechanism known as shunting<sup>1</sup> allows for compensatory redistribution of blood flow to occur. It ensures that during episodes of prolonged foetal hypoxia, blood is directed to vital brain structures of the foetus, at the expense of less metabolically active structures, namely the cerebral cortex and the white matter. This generally protects the brain stem, cerebellum and deep grey matter from injury during a prolonged episode. An injury sustained during a prolonged episode is less severe, with partial asphyxia. It develops over several hours and is often preceded by a deteriorating foetal heart rate that serves as a warning of the development of hypoxia.

[6] The plaintiff's pleaded case is in essence focused on an alleged failure by the midwives to provide adequate care by failing to properly monitor the plaintiff's labour, to gather information on the condition of the foetus, and to ensure that

<sup>&</sup>lt;sup>1</sup> See paras [15] and [16] below.

timeous interventions were implemented to prevent a prolonged labour, and thereby preventing the foetus from suffering from a lack of oxygen. A ground of negligence that received much attention in evidence and in argument was that the midwives requested a security guard to apply physical pressure to the plaintiff's abdomen to effect delivery **"in circumstances where other usual means of delivery (caesarean section, alternatively ventouse, alternatively forceps delivery) would have been appropriate and a safe method of delivery."** The plaintiff advanced a secondary case in argument that was not pleaded, which is that the midwives, following NP's delivery, failed to take adequate steps to resuscitate her and that it contributed to the injury she had sustained during labour.

[7] The plaintiff testified, and adduced the evidence of three expert witnesses, being Dr Hofmeyer, a specialist obstetrician and gynaecologist at the Christiaan Barnard Netcare Hospital in Cape Town; Prof Kirsten, a specialist neonatologist, who prior to his retirement was attached to the Department of Paediatricians and Child Health at the Tygerberg Children's Hospital and the University of Stellenbosch; and Prof Nolte, a professor of nursing. The defendant, in turn, called Sister Minnaar who, together with a Sister Laminie, were the midwives that attended to the plaintiff's labour. A sister Bosman admitted the plaintiff and performed the foetal cardiotocography.<sup>2</sup> The defendant also presented the evidence of two expert witnesses; Dr Nel, is an obstetrician and gynaecologist who, on his retirement, was the Head of the Department of Obstetrics and Gynaecology at the George Provincial Hospital, and Prof Cooper, a paediatrician and neonatologist who has been conferred the status of Emeritus Professor by the School of Clinical Medicine of the University of the Witwatersrand. No issue was taken with the expertise of any of the expert witnesses, and I find them to have been duly qualified to have given the opinions which they did.

[8] The issues put forward by the plaintiff for determination are in essence the following two questions:

<sup>&</sup>lt;sup>2</sup> See para [18].

- (i) Was there conduct on the part of the midwives and the medical personnel at the hospital, either during the plaintiff's labour or subsequent thereto, that did not meet the standard of care that was required of them in the circumstances; and,
- (ii) If they are found to have been negligent, did such negligence cause or materially contribute to PN's condition?

[9] The legal burden of proof is on the plaintiff. The standard of proof is the civil standard of proof on a balance or preponderance of probabilities, that is to say, that the case of the party that bears the burden of proof is more likely than not to be true. How that burden is discharged, is an aspect which will be dealt with more fully when I deal with the issues that I was asked to decide.

[10] In argument the submission was that the evidence proves that the injury suffered by PN was caused by, or was contributed to, by a chain of events that

manifested itself by reason of the negligent conduct of the midwives and the medical personnel of the hospital namely:

- (a) An unchecked, un-remedied tapping of foetal reserves during labour;
- (b) The application of excessive, continued fundal pressure to the foetus, that severely compromised and injured the foetus; and
- (c) The ineffective resuscitation of PN after birth.

[11] At the outset, and before addressing the aforesaid issues, it is appropriate to deal with certain of the definitions and explanatory evidence tendered by the expert witnesses, in order to have a better understanding of the evidence contextually. Most of this evidence comes from the expert reports and the summaries of the evidence of expert witnesses that was either not seriously disputed, or remained undisputed.

[12] Normal labour is divided into four stages and it is documented as such. Each stage has certain criteria and guidelines in order to optimise both maternal and foetal

well-being and minimise maternal and foetal risk. The onset of labour is defined as the presence of regular contractions with one of the other signs of labour being present, namely a show, rupture of the membranes or cervical dilations.

[13] From the commencement of labour up to full cervical dilation (10 cm) is the first stage of labour. The first stage is divided into two phases namely latent and active labour. During the latent phase the cervical dilation progresses to 4 cm, and contractions strengthen to about 3 moderate contractions per 10 minutes. In a primigravida (a mother who had no previous deliveries), the latent phase commonly lasts approximately 8 hours.

[14] The second stage of labour begins when the cervix is fully dilated, and ends with the birth of the baby. It is subdivided into two phases. The first phase is from full dilation until the presenting part of the foetus reaches the pelvic floor. In the second stage the foetus presents itself on the perineum of the mother, and she has the urge to bear down. The third stage of labour is placental delivery, and the fourth stage refers to the post-partum period.

[15] From the evidence it is evident that a function of intrapartum monitoring by the midwives is to detect developing foetal hypoxemia. Hypoxemia is a decrease of oxygen levels in the blood of the foetus. Hypoxemia during labour is not per se an It occurs naturally during labour, for example during adverse condition. contractions. The foetus is however normally equipped to deal with such episodes. The reason lies in the physiology of the foetus. In utero (in the womb) it is accustomed to a lower level of oxygen than what the norm is after birth. The foetus is consequently well equipped to tolerate intervals of oxygen deprivation, as it will frequently occur during contractions in labour. The compensatory response of the foetus to hypoxemia during labour is to increase its heart rate and to redistribute oxygenated blood to more deserving organs, such as the brain, heart and adrenal glands. This mechanism is known as "shunting".

[16] Should the oxygen levels in the blood however for some or other reason remain low, and the oxygen levels are not restored, it will lead to hypoxia. Hypoxia is when the lack of oxygen causes irreparable cell damage to the essential organs. If it continues and oxygen is not restored, it will lead to asphyxia which is when the lack of oxygen is inadequate to maintain the essential organs from functioning. This leads to cell death in the heart, brain and adrenal glands. This injury is believed to be the major cause of hypoxic ischaemic encephalopathy.

[17] The term "**ischaemic**" refers to oxygen deficiency due to decreased blood flow and the under-perfusion of an organ or tissue. It may operate in combination with primary hypoxia. The term "**bradycardia**" refers to a low foetal heartrate.

[18] Foetal cardiotocography or CTG monitoring is an electronic recording of the heartrate of the foetus. This form of monitoring during labour involves the placing of sensory devices on the abdomen of the mother. It provides two outputs. The first is an audible noise of the foetal heart rate. The second is a printed CTG trace, which is a graphical representation of the results of the CTG monitoring. The CTG trace has two parts. The upper part of the trace represents the foetal heart rate, whilst the bottom line of the strip shows the mother's uterine contractions.

[19] The intervals of hypoxemia during labour presents itself in the cardiotography (CTG) monitoring as an acceleration of the heart rate when blood is distributed to the vital organs, followed by a deceleration of the heart rate. Dr Hofmeyer explained, in respect of a CTG trace, that the foetal heartrate is assessed for four features. The first is the baseline rate. It represents the average foetal heart rate between accelerations and decelerations. The second is the variability of the trace and represents the changes in the heartrate of the foetus. A normal foetal heartrate should vary with more than five beats per minute. Good variation is an indicator of a healthy foetus. The third feature is the presence of accelerations which occur when the foetus becomes excited or stimulated, and the heartrate jumps from the baseline up. The fourth is the presence of decelerations that indicate a fall in the heart rate.

For it to be significant, a deceleration must consist of a slowing of the foetal heartrate (bradycardia) to below at least fifteen beats per minute below the assessed baseline.

[20] A common indicator of a foetal heart rate trace that is non-reassuring and may signal foetal distress, is an increased heart rate above 160 bpm that is not corrected, followed by decelerations below 110 beats per minute which are completely independent of contractions. Prolonged, deep or persistent decelerations can progress to either a pre-terminal bradycardia and foetal death, if there is no corrective intervention, or it can progress to partial asphyxia which is commonly seen through a flat CTG trace.

[21] The condition of the mother and the foetus, and the progress of labour is recorded in a document known as a partogram. It is a graphical representation of labour from the onset of labour to the birth of the child. "Caput" is a soft tissue swelling on the head of a new born. It develops when the labour is prolonged, and

when there is some degree of obstruction to the head coming through the pelvis. It may be caused where the baby's head is proportionally too large or the mother's pelvis is too small to easily allow the baby to fit through the pelvic opening. This is not abnormal, but is an important clinical finding, as it may be indicative of some degree of difficulty or obstruction of the baby's head descending through the pelvis.

[22] "Meconium" is foetal bowel content. It is indicative of a foetus that is distressed while still in the womb. If distressed the foetus will expel a faecal-like material called meconium into the amniotic fluid, making it dark in colour. The absence of meconium in the amniotic fluid when it is released by the rupture of the membranes at the onset of labour, is a reassuring sign, but not determinative of the absence of foetal distress.

[23] **Cephalopelvic disproportion** is when the foetal head is too large, or in a position that renders it difficult to pass through the pelvis of the mother. **Fundal pressure** is a

procedure where the person delivering a child would apply pressure on the fundus of the uterus of the mother during contractions to create longitudinal force towards a specific angle to the pelvis to assist the passage of the foetus through the birth canal. The fundus is the top part of the uterus. An **Apgar score** is a table of measurement which describes the condition of a newborn immediately after birth, and is used to determine whether the newborn requires medical intervention or assistance such as resuscitation at birth. The newborn is given a score for the following: the appearance of a neonate, pulse rate, grimace (facial expression), activity, and respiration (breathing).

[24] Turning then to deal with the identified issues, the focus of the first issue as formulated by the plaintiff, is on the first stage of the plaintiff's labour. This issue calls into question the standard of the monitoring of the plaintiff's labour and an alleged failure to detect foetal distress. The contention, put simply, is that during the first stage of labour, the foetus showed signs of distress; that the negligence on the part of the midwives caused the foetus to arrive during the second stage of labour in a compromised condition; and that the said negligent conduct, resulted in the foetus being unable to cope with the event that ultimately caused it to sustain the brain injury. The submission is premised on the proposition that the condition of the foetus when it arrived at that event contributed to the ultimate injury which PN sustained.

[25] This issue raises the following questions:

- (a) Was the foetus in distress during the first stage of labour?
- (b) If so, did the midwives fail to manage it according to the required standard?
- (c) Did the foetus arrive at the active stage of labour in a weakened state?;and
- (d) If so, did it cause or contribute to the foetus being unable to cope with the event that caused the injury?

The plaintiff's proposition that the foetus arrived at the event that caused the [26] injury in a weakened condition, is premised on the following: that the midwives did not properly interpret the decelerations that were recorded by the CTG; which decelerations provided evidence of foetal distress; that they had failed to initiate foetal resuscitation by turning the plaintiff onto her side and providing her with oxygen; that whilst the foetal heart variability was recorded by the midwives as being good throughout the plaintiff's labour, variability can only be assessed by way of a printed CTG, which CTG monitoring was in any event prematurely discontinued approximately an hour into the plaintiff's labour; that the plaintiff's labour was prolonged, which was evidenced by the clinical note that there was poor maternal effort by the time the plaintiff was fully dilated and started to bear down; and that there were warning signs present which ought to have alerted the midwives to call a doctor to intervene in the delivery of PN. The warning signs are centred around the proposition that the plaintiff was small in stature, and that an obstructed labour due to cephalopelvic disproportion ought to have been considered. This resulted in a

second stage of labour that lasted longer than what would otherwise have been expected.

[27] The plaintiff is relying primarily on expert evidence in support of the above proposition. The expert opinion was based on the notes of the clinic in respect of antenatal care, the CTG trace, and the hospital notes of the midwives. Before I proceed to deal with the evidence of the expert witnesses on this issue, it may be convenient to say something about how that evidence is to be approached and evaluated when there is conflicting or inconsistent evidence from two or more expert witnesses. "In the law of evidence 'opinion' means any inference from observed facts, and the law on the subject derives from the general rule that witnesses must speak only to that which was directly observed by them."<sup>3</sup> Opinion is admissible if it is relevant. Relevance is in turn determined by the issues in the matter. If the opinion can assist

<sup>&</sup>lt;sup>3</sup> Cross on Evidence 7<sup>th</sup> Ed at page 489. See also Schmidt v Rademeyer Law of Evidence at page 17 – 4 and McGregor and Another v MEC for Health Western Cape (1258/2018) [2020] ZASCA 89 (31 July 2020) (McGregor) at para [21].

the court in determining an issue, is has probative value, otherwise it is superfluous.<sup>4</sup> Expert opinion evidence is received when the issues require special skill and knowledge to draw the right inferences from the facts stated by the witnesses.<sup>5</sup>

[28] Conceptually there are several types of conflicts in expert evidence that may present itself in any given case. Some of these are the following: The first is a conflict with regard to the assumed facts. By reason of its very nature, expert opinion must have a factual basis. The facts upon which an expert's opinion is based must be proved by admissible evidence, and the expert witness should be asked in examination-in-chief what those facts are.<sup>6</sup> "An expert's opinion represents his reasoned conclusion based on certain facts or data, which are either common cause, or established by his own evidence or that of some other competent witness. Except possibly where it is not controverted, an expert's bald statement of his opinion is not of any real assistance."<sup>7</sup> How those facts are proven

<sup>&</sup>lt;sup>4</sup> Ruto Flour Mills (Pty) Ltd v Adelson (1) 1958 (4) SA 235 (T) at 237 A – B. See generally Schwikkard v van der Merwe Principles of Evidence 3<sup>rd</sup> Ed at page 83 and 87.

<sup>&</sup>lt;sup>5</sup> Menday v Protea Assurance Co Ltd 1976 (1) SA 565 (E) at 569 and Coopers (South Africa) (Pty) Ltd v Deutsche Gesellschaft Für Schädlingsbekämpfung Mbh 1976 (3) SA 352 (A) (Coopers) at 370 F – G.

<sup>&</sup>lt;sup>6</sup> Cross op cit at page 494. See also Schmidt v Rademeyer op cit at 17 – 14.

<sup>&</sup>lt;sup>7</sup> Coopers at 371 F-H.

is determined by the principles of evidence and the usual methods used for judicial fact finding and rational decision-making. Where the expert him or herself observed relevant facts, that evidence will be evidence of fact and admissible as such.<sup>8</sup> Where the opinion seeks to take issue on the facts with the version of direct eyewitness evidence, credible eyewitness evidence that conforms to the probabilities, will generally take preference to the opinion of an expert of what the facts are.<sup>9</sup> In the final result, the decision of what the facts are must be founded on an assessment of the evidence as a whole and the probabilities as they appear therefrom.<sup>10</sup>

[29] Secondly, a conflict in the expert opinion may lie in the analysis of the established facts and the inferences drawn therefrom by opposing expert witnesses. In the present context an example of this type of dispute is whether the CTG tracings provide evidence of foetal distress, or that the administering of adrenalin was

<sup>&</sup>lt;sup>8</sup> AM and Another v MEC for Health, Western Cape (1258/2018) [2020] ZASCA 89 (31 July 2020) at para [17]. <sup>9</sup> Mapota v Santam Versekeringsmaatskappy Bpk 1977 (4) SA 515 (A) from 527 to 528; Stacey v Kent 1995 (3) SA 344 (E) at 348 to 349; Motor Vehicle Assurance Fund v Kenny 1984 (4) SA 432 (E) and Representative of Lloyd's and Others v Classic Sailing Adventures (Pty) Ltd 2010 (4) All SA 366 (SCA) at para [60]. <sup>10</sup> Stacey supra.

evidence of a very low heartrate. A proper evaluation of the evidence in this context focuses primarily on "the process of reasoning which led to the conclusion, including the premise from which the reasoning proceeds..."<sup>11</sup> The reason for interrogating the underlying premise of expert opinion lies in its nature. In essence it amounts, as in the present context, to a statement that established medical opinion, as the expert witness interprets it, dictates a particular result under an assumed set of facts. This requires an assessment of the rationality and internal consistency of the evidence of each of the expert witnesses.<sup>12</sup> "The cogency of an expert opinion depends on its consistency with proven facts and on the reasoning by which the conclusion is reached."<sup>13</sup> The source for the evaluation of this evidence are the reasons that have been provided for the position taken by the expert, and whether that reasoning has a logical basis when measured against the established facts, and the probabilities raised on the facts of the matter.<sup>14</sup> It means that the opinion must be logical in its

<sup>&</sup>lt;sup>11</sup> Coopers at 371 H.

<sup>&</sup>lt;sup>12</sup> Michael and Another v Linksfield Park Clinic (Pty) Ltd and Another 2001 (3) SA 1188 (SCA) (Linksfield) and Oppelt v Department of Health 2016 (1) SA 325 (CC) (Oppelt) at para [36].

<sup>&</sup>lt;sup>13</sup> MEC for Health and Social Development, Gauteng v TM obo MM (380/2019) [2021] ZASCA 110 (10 August 2021) at para [125].

<sup>&</sup>lt;sup>14</sup> Oppelt supra at para [35].

own context, that is, it must accord with, and be consistent with all the established facts, and must not postulate facts which have not been proved.<sup>15</sup>

[30] The inferences drawn from the facts must be sound. Whether or not evidence permit the drawing of an inference, will be dealt with more fully hereinunder.<sup>16</sup> The internal logic of the opinion must be consistent, and the reasoning adopted in arriving at the conclusion in question must accord with what the accepted standards of methodology are in the relevant discipline.<sup>17</sup> The reasoning will be illogical or irrational and consequently unreliable, if it is based on a misinterpretation of the facts, or it is speculative, or internally contradictory or inconsistent to be unreliable, or if the opinion is based on a standard of conduct that is higher or lower than what has been found to be the acceptable standard, or if the methodology employed by the expert witness is flawed. What flows from this is that the fact that an expert opinion is unchallenged, does not necessarily mean that it must be accepted. "The

<sup>&</sup>lt;sup>15</sup> MEC for Health and Social Development, Gauteng v TM obo MM supra at para [126].

<sup>&</sup>lt;sup>16</sup> See para [38] below.

<sup>&</sup>lt;sup>17</sup> Schwikkard and van der Merwe op cit at page 99 and the authorities referred to in fn 102.

Court is not bound to absolve a defendant from liability for allegedly negligent medical treatment or diagnosis just because evidence of expert opinion, albeit genuinely held, is that the treatment or diagnosis in issue accorded with sound medical practice. The Court must be satisfied that such opinion has a logical basis, in other words that the expert has considered comparative risks and benefits and has reached 'a defensive conclusion'."<sup>18</sup>

[31] Other considerations relevant in this context are the qualifications and the experience of the expert witnesses with regard to the issue he or she is asked to express an opinion on; support by authoritative, peer-reviewed literature;<sup>19</sup> the measure of equivocality with which the opinion is expressed, the quality of the investigation done by the expert, and the presence or absence of impartiality or a lack of objectivity. What is ultimately required is a critical evaluation of the reasoning on which the opinion is based, rather than on considerations of credibility.<sup>20</sup> Should it not be possible to resolve a conflict in the expert opinion

<sup>&</sup>lt;sup>18</sup> Linksfield supra at para [37].

<sup>&</sup>lt;sup>19</sup> AN v MEC for Health, Eastern Cape [2019] 4 All SA 1 (SCA) at para [22] and MEC for Health and Social Development, Gauteng v TM obo MM supra at para [126].

<sup>&</sup>lt;sup>20</sup> Oppelt supra at para [36].

presented to the court in this manner, that is, when the two opposing opinions are found to be sound and reasonable, the position of the overall burden of proof will inevitably determine which party must fail.

[32] Another type of conflict, which may arise in expert evidence, is the position of competing theories of a purely scientific nature. The choice between two conflicting theories is informed primarily by the extent to which the theory is regarded as being established and has gained general acceptance within the specific scientific community in the particular discipline to which it belongs. Whether or not a theory has been sufficiently established must be measured against considerations such as whether it can, and has been tested, whether it is the product of reliable principles and methods that have been reliably applied to the facts of the case, and it has been subjected to peer review and publication. [33] A dispute may also arise in the context of what the accepted standard of conduct of a medical professional is in certain circumstances. Typically medical negligence cases deal with the situation where an injury is alleged to be in complete discord with the recognised therapeutic objective and techniques of the operation or treatment involved. Expert opinion, in this context, is aimed at determining whether the conduct of a professional person in a particular field accords with what is regarded as sound practice in that field. Again, the method adopted is to evaluate opinion evidence with the view of establishing the extent to which the opinions advanced are founded on logical reasoning.<sup>21</sup>

[34] What is evident from the aforegoing is that the evaluation of expert opinion in determining its probative value and the considerations relevant thereto, are determined by the nature of the conflict in the opinion, and the context provided by all the evidence and the issues which the court is asked to determine. In general, it

<sup>&</sup>lt;sup>21</sup> Linksfield supra at para [37] and [38]; Medi-Clinic v Vermeulen 2015 (1) SA 241 (SCA) at paras [4] to [8] and MEC for Health and Social Development, Gauteng v TM obo MM supra at para [125].

is important to bear in mind that it is ultimately the task of the court to determine the probative value of expert evidence placed before it and to make its own finding with regards to the issues raised.<sup>22</sup> Faced with a conflict in the expert testimony of the opposing parties, the court is required to justify its preference for one opinion over another by a careful evaluation thereof. Further, the primary function of an expert witness is to guide the court to a correct decision on questions which fall within that expert's specialised field. To that extent, the expert witness has a duty to provide the court with abstract or general knowledge concerning his or her discipline, and the criteria, necessary to enable the court to form its own independent judgment by the application of the criteria to the facts proved in evidence.<sup>23</sup> Accordingly, the mere "... pitting of one hypothesis against another does not constitute the discharge of the functions of an expert."<sup>24</sup> Finally, it is not the function of the court to develop its own

 $<sup>^{22}</sup>$  Van Wyk v Lewis 1924 AD 438 at 447 and S v Gouws 1967 (4) SA 527 (E) at 528D. See also Schmidt and Rademeyer op cit at page 17 - 16.

<sup>&</sup>lt;sup>23</sup> See the authorities referred to in Stacey supra at 348 to 359 F. See also AM and Another v MEC for Health supra at para [17].

<sup>&</sup>lt;sup>24</sup> Stacey supra at 350 G-H.

theory or thesis and to introduce on its own accord evidence that is otherwise founded on special knowledge and skill.<sup>25</sup>

In the present matter, the conflict in the expert evidence regarding the issue of [35] negligence falls primarily into the second category. The primary source of the facts are the medical records referred to earlier. On a whole, there exists no reason to doubt the honesty and the reliability with which the information contained in those documents have been recorded. The honesty of the midwives was not disputed. The reliability of one or two aspects thereof were put into question, such as the recordal of the time at which the paediatrician saw PN after birth, and the accuracy of the Apgar score and the heartrate recordings. I shall address the latter aspect in more detail when dealing with the plaintiff's submissions regarding the standard of PN's resuscitation. On an overall conspectus, I am satisfied that where mistakes were made, they are isolated and satisfactorily explained, and when measured against the

<sup>&</sup>lt;sup>25</sup> MEC for Health, Eastern Cape v ZM obo LM (576/2019) ZASCA 160 (14 December 2020) at paras [12] and [13].

overall standard of recording of the midwives, are insufficient to detract from the reliability of this evidence as a whole.

The first question is then whether or not the midwives were negligent. [36] Negligence is established if a reasonable person would foresee the reasonable possibility of his or her conduct injuring another person and causing that person patrimonial loss, and would, in such circumstances take reasonable steps to guard against such occurrence.<sup>26</sup> The requirements for negligence are applied to a reasonable person in the position of the defendant. This means that the specific qualities of the defendant, such as specialised skills and knowledge which he or she possessed at the time, must be considered in assessing his or her conduct against the requirements for negligence. Consequently, the relationship between a plaintiff and a defendant that possess specialised skill and knowledge may require a standard of care from the defendant that is different to what the standard would otherwise be.

<sup>&</sup>lt;sup>26</sup> Kruger v Coetzee 1966 (2) SA 428 (A) at 430 E.

[37] A professional midwife falls within a category of persons, not unlike any other person who engages in a profession which demands special knowledge and skill, who must measure up to the standard of competence and skill of a person professing such competence and skill.<sup>27</sup> It is not expected of such a defendant too exercise the highest possible degree of professional skill.<sup>28</sup> What is expected of him or her is the general level of skill and diligence, which is possessed and would ordinarily be exercised by a reasonable member of the branch of the profession to which he or she belongs under similar circumstances. Where the conduct relied upon is the failure to adhere to a particular practice or procedure, the question is whether the conduct falls within the range of acceptable practice at the relevant time.<sup>29</sup>

[38] On an application of these principles to the facts of the present matter, it must follow that negligence is not presumed, but must be established by substantive evidence. The fact of a poor outcome in itself does not establish negligence. As

<sup>&</sup>lt;sup>27</sup> Van Wyk v Lewis supra at 444.

<sup>&</sup>lt;sup>28</sup> Mitchell v Dixon 1914 AD 519 at 525.

<sup>&</sup>lt;sup>29</sup> Mitchell v Dixon supra at 525; Van Wyk v Lewis supra at 444; Blyth v Van Den Heever 1980 (1) SA 191 (A) at 221 A and Medi-Clinic Ltd v Vermeulen 2015 (1) SA 241 (SCA) at para [33].

stated by Lord Denning in Hucks v Cole,<sup>30</sup> "... with the best will in the world things sometimes went amiss in surgical operations or medical treatment. A doctor was not to be held negligent simply because something went wrong."<sup>31</sup> In the present context, reasoning of this nature would simply be because the plaintiff had a normal pregnancy, yet she gave birth to an injured child, therefore, there was negligence. This reasoning is based on the drawing of an inference simply from the temporal sequence of events, which is an unreliable method of inferential reasoning. Inferential reasoning is an accepted technique that is utilised in judicial fact-finding. However, the inference sought to be drawn must be capable of being drawn from the objective facts established by evidence.<sup>32</sup> If tenuous, or far-fetched, it cannot form the foundation for the court to make any finding of fact.<sup>33</sup> Further, the inference must be based on, and be consistent with all the admitted or proved facts, and not be matters of

<sup>&</sup>lt;sup>30</sup> [1993] 4 Med LR 393. See also Van Wyk v Lewis supra.

<sup>&</sup>lt;sup>31</sup> See also Castell v De Greef [1993] 3 All SA 263 (C) at 270.

<sup>&</sup>lt;sup>32</sup> The inference must be the readily apparent and acceptable inference from a number of possible inferences. See AA Onderlinge Assuransie Bpk v De Beer 1982 (2) SA 603 (A) at 620 E – G; Cooper and Another NNO v Merchant Trade Finance Ltd 2000 (3) SA 1009 (SCA) and Goliath v MEC for Health 2015 (2) SA 97 (SCA). **"Evidence does not include contention, submission or conjecture."** Great River Shipping Inc v Sunnyface Marine Limited 1994 (1) SA 65 (C) at 75 I – 76 C.

<sup>&</sup>lt;sup>33</sup> Imperial Marine Co v Deiulemar Compagnia Di Navigazione Spa 2012 (1) SA 58 (SCA) at para [24] and Motor Vehicle Assuarance Fund v Dubwzane 1984 (11) SA 900 (A) at 706 B – D.

speculation.<sup>34</sup> In this matter, the fact of a poor outcome cannot support the drawing of an inference of negligence without more. The accepted evidence on behalf of the expert witnesses in the present matter is that an injury, such as the one sustained by PN, may result from an unanticipated event that occasionally takes place without prior warning, and despite proper monitoring of the maternal and foetal condition. The fact that the mother had an otherwise normal pregnancy, viewed together with the presence of a birth injury, is accordingly not in itself sufficient to draw an inference that the conduct on behalf of the midwives was negligent during the plaintiff<sup>\*</sup>s labour.

[39] Liability will only be imposed if it was proven that the unfavourable outcome of the plaintiff's labour was reasonably foreseeable, and that the midwives must be found not to have provided the level of skill and competence that would otherwise be expected to have been provided by a reasonable midwife in similar circumstances. Another aspect to bear in mind is the word of caution expressed in *Braude v* 

<sup>&</sup>lt;sup>34</sup> McGregor supra at para [21].

*McIntosh*,<sup>35</sup> namely, the adoption of an approach to the evidence that would not account for the burden of proof:

"There is of course another consideration to be borne in mind in cases of this kind, when a patient has suffered greatly because of something that has occurred during an operation a court must guard against its understandable sympathy for the blameless patient tempting it to infer negligence more readily than the evidence objectively justifies, and more readily than it would have done in a case not involving personal injury. Any such approach to the matter would be subversive of the undoubted incidence of the onus of proof of negligence in our law in an action such as this."

In the final analysis, negligence must be determined in the light of all the evidence.<sup>36</sup>

<sup>&</sup>lt;sup>35</sup> 1998 (3) SA 64 (SCA) at 75 A-B. See also Buthelezi V Ndaba 2013 (5) SA 437 (SCA) at para [15] and AM and Another v MEC for Health, Western Cape supra at para [107].

<sup>&</sup>lt;sup>36</sup> Meyers v MEC of Health, Eastern Cape 2020 (3) SA 337 (SCA) at para [69].

[40] It is for the plaintiff, as the party who bears the overall burden of proof, to show what the required standard of skill and competence is in any particular case. From the evidence of Prof(s) Nolte and Kirsten, the skill and the competence possessed by a reasonable midwife may be widely stated as to include the ability to provide support to the mother; to monitor, gather and record information on the status of the foetus and the mother; to deal with, and to report on any significant changes or problems during labour, and to take steps to ensure medical intervention by a doctor if and when it is required.

[41] I am not persuaded that the evidence on which the plaintiff placed reliance for the submission made, lends support to a finding, on the required standard of proof, that the midwives were negligent in their monitoring of the status of the foetus during the first stage of the plaintiff's labour. It is inconsistent with the evidence of the plaintiff's own witness, namely Dr Hofmeyer, that the plaintiff probably endured a normal first stage of labour up to the time of full dilation. I am satisfied that the evidence supports this view expressed by her. Insofar as there may be differences in the evidence of the expert witnesses regarding the standard of care during this stage of labour, I prefer the evidence of the defendant's witness, Dr Nel. What follows are the reasons for these findings.

The failure by the midwives to continue the CTG recording beyond the first [42] hour and a half does not on its own raise the likelihood of a failure to diligently monitor the plaintiff's labour. Both Prof Kirsten and Dr Hofmeyer acknowledged in their evidence that at the relevant time the maternal guidelines did not require the midwives to either have been in possession of a cardiotocograph machine, or to use such a machine to monitor the labour process. Dr Hofmeyer also acknowledged that CTG monitoring is not a substitute for good clinical observation and judgment. Further, whilst describing it as a generalisation, Dr Hofmeyer acknowledged that the information at hand shows that the use of cardiotocograph monitoring has not reduced the incidences of foetal compromise. Another aspect is that it is evident from the evidence in this case that the use of, and the interpretation of CTG tracings, has an element of unreliability to it. It is not only open to interpretation, but may

also render an inaccurate recording caused by otherwise harmless events, such as the fact that the mother was lying on her back; or that she was touching her stomach; or that adjustments were made to the contact points; or that there was a loss of contact when the mother was turned from one side to another.

The opinion of a prolonged second stage of labour and poor progress was [43] based on two things: firstly, it was premised on the assumption by the plaintiff's expert witnesses that there was a time lapse of an hour and 20 minutes between the time that the plaintiff was fully dilated, and when she gave birth to PN. This was an incorrect assumption based on taking the time of full dilation as 22h15, as opposed to 23h15, an hour later. There is no reason to doubt the evidence of Sister Minnaar in this regard. It is supported by the context of what was recorded in the clinical notes, and Dr Hofmeyer was unable to suggest any reason for that not to be the correct position. Dr Hofmeyer was left with no option but to accept that the plaintiff was fully dilated at 23h15, and not 22h15, the time on which her opinion was based. In addition, Prof Kirsten acknowledged that, provided the foetal condition is good,
the second stage of labour could be as long as two hours without any complications. Dr Hofmeyer similarly acknowledged this in cross-examination. She was also constrained to acknowledge that her opinion that the plaintiff's labour progressed poorly in the final stages, by reason of the plaintiff bearing down prematurely, and that the decent of the head of the foetus was slow, was based on the incorrect assumption regarding the timeline, and that the midwives did nothing to stop the plaintiff from bearing down. The latter aspect is in any event inconsistent with the clinical notes, where it was specifically recorded that the plaintiff was distracted from the urge to bear down, by her being advised to sit up. It is also inconsistent with the plaintiff's own evidence that she was told to breathe deeply, which is an accepted method to achieve distraction from the urge to bear down. The result is that the time lapse between dilation and birth is, on the facts of this matter, not evidence of a prolonged labour.

[44] Is there evidence of an obstructed labour that should have caused the midwives to take action? The answer in my view is no. Prof Nolte expressed the

opinion that there was an indication from the clinical records of a slowing down of the cervical dilation and in the descent of the foetal head, and that same was evidence of an obstructed labour. Prof Kirsten, in turn, simply accepted the correctness of Prof Nolte's opinion without expressing an opinion of his own. Dr Hofmeyer was of the opinion that if the plaintiff was fully dilated without the foetal head having fully descended into the pelvis, it would have been a matter of concern without it being conclusive of there being an obstruction. The evidence on which Prof Nolte and Dr Hofmeyer based their respective opinions does not stand up to scrutiny. They both conceded, under cross-examination, that a slowing down of dilation and a descent of the foetal head towards the end of the first stage of labour, and shortly before the commencement of the second stage of labour, is not uncommon. Dr Hofmeyer was further obliged to concede that an external assessment of the foetal head above the pelvic rim was subjective, as the midwife only has "5 cm ... or 5 fifths to work with." The subjective nature of this assessment similarly finds application to the measurement of the extent of cervical dilation before the mother is fully dilated.

There was no evidence that the plaintiff had cephalopelvic disproportion that [45] may have caused an obstructed labour. Dr Hofmeyer acknowledged that to be the position. She also conceded that PN was a smaller than normal baby, and that the time that expired from when the plaintiff started bearing down until delivery, cannot strictly be defined as a prolonged second stage of labour. The next question is whether the presence of a caput is evidence of an obstructed labour. There are numerous difficulties with this proposition on the facts of this case. As a point of departure, the mere presence of a caput is not, on its own, without further evidence, indicative of an obstructed labour. Further, the assessment of the extent of a caput is based on the subjective interpretation of the midwife or obstetrician of its size. Significantly, Dr Hofmeyer conceded that her opinion was largely based on, what transpired to be an incorrect assumption of the extent of the caput as recorded by the midwives. The caput was recorded as plus one, and not plus two as the plaintiff's expert witnesses had assumed it to be.

[46] Prof Kirsten in his evidence sought to rely on what the nursing staff later in the neonatal intensive care unit noted to be a "huge" caput. This description of the caput is not normal nomenclature for the classification of a caput, and Dr Hofmeyer acknowledged that it is impossible to quantify the caput by using such a description. She could take it no further than to state that for a person to record a caput in such a manner, it must have been significant. The subjective nature of the assessment regarding the size of a caput, together with the use of incorrect terminology for its classification, in the absence of an explanation therefor from the person who made the recordal, introduces speculation and doubt as to its reliability as evidence of an obstructed labour. That description must be measured against the clinical notes of the midwives, whose trained function was to measure the size of the caput and to record it.

[47] There is no evidence that the midwives in any way failed in their duties with regard to the meticulous recording of the progress of the plaintiff's labour. On the contrary, the midwifery staff properly completed the partogram which contained detailed recordings. For example, it included recordings of the foetal heart rate as measured every half hour, and which heart rate was always within acceptable parameters. Dr Hofmeyer described the partogram as **"beautiful"**. She further described the recording of the cervical dilation as **"text book"**, and she was obliged to concede that the first stage of labour was probably normal. When it was put to Dr Hofmeyer that there was no evidence of cephalopelvic disproportion, she agreed that there was, with what she described as the plaintiff's definition, no poor progress or obstruction.

[48] The plaintiff's amniotic fluid was recorded as normal, which means that there was no meconium present. The significance of this is that the presence of meconium may otherwise be indicative of foetal distress. This meant that there was nothing to warn the midwives of possible foetal distress when the plaintiff was admitted to the labour ward. The opinion evidence with regard to there being two early decelerations recorded by the CTG thereafter is in my view insufficient to raise the probability that the foetus, to the knowledge of a reasonable midwife, was under

stress, and that it had to be managed by seeking the intervention of a doctor. In the summary of her evidence Dr Hofmeyer recorded that the CTG tracings showed that the foetus was in distress. In her evidence, she changed that assessment to one of a CTG trace that was "not a reassuring trace but rather a suspicious trace." Her obvious change of mind in this regard must be measured against her later evidence in crossexamination that the interpretation of CTG tracings are fraught with inter and intraobserver differences in interpretation. Any importance that the two decelerations may have had in the context of measuring the standard of care given by the midwives, was further diminished by Dr Hofmeyer's concession, late in her evidence when she agreed with Dr Nel that the concern should rather have been focussed on the lack of variability towards the end of the CTG tracing, rather than what was interpreted as two decelerations at the beginning of the tracing.

[49] The second feature of the CTG tracing, on which it was contended on behalf of the plaintiff that the midwives had failed to act on, was what has been identified as a lack of variability towards the end of the tracing. This however appears to be of very little significance. In the summary of her opinion, Dr Hofmeyer described the relevant variability recorded by the trace as subtle, and that it may have gone unnoticed by the midwives. She confirmed this in her viva voce evidence by a concession that the midwives may reasonably have missed the lack of variability. This concession is not only a negation of the allegation of a lack of care on the part of the midwives, but is also indicative of the fact that the variability was of such a nature that it could easily have gone unnoticed. This is consistent with the evidence of Dr Nel, the defendant's expert witness that the reduced variability as recorded on the tracing was a very subtle sign, and that, as he put it, takes a lot of staring at CTG tracings to detect such changes. Dr Nel similarly did not expect the midwives to have noticed the reduced variability. Another feature in this regard is that of the reliability of a CTG tracing. According to Dr Nel, interpreted as decelerations, the relevant recordings may well have been due to a loss of contact with the machine. In addition, there may have been other causes of a recorded reduced variability such as the administering of sedatives.

[50] Even assuming in the plaintiff's favour that the midwives were negligent in their monitoring of the condition of the foetus, the timing of when the injury occurred having been determined as shortly before birth, it would mean that such failure could, on the probabilities, have had no causal effect on the catastrophic nature of the injury which PN sustained in the second stages of labour. Prof Kirsten explained that where there is a sentinel event in the second stage of labour, there is nothing that can be done at that stage, as it will take thirty to forty-five minutes to do a caesarean section. Counsel for the plaintiff understandably therefore limited her argument with regard to the conduct of the midwives during labour to the submission that had the foetus arrived at the catastrophic event in a healthy state, it would have had better reserves to deal with that event, and would have been less susceptible to injury. The difficulty with this argument is that there is no measure to determine in what condition the foetus arrived at the event that caused the injury, and any attempt at determining the role which the condition of the foetus may have played in it having sustained the injury in question, would amount to nothing more than speculation.

[51] The next ground of negligence on which the plaintiff placed reliance was pivotal to her case. It is based on the evidence of the plaintiff that a male security guard was allowed to enter the delivery room and asked to exert physical pressure on her abdomen shortly before she gave birth to PN. There is no question that this conduct, if the evidence of the plaintiff in this regard is accepted, would constitute negligence on the part of the defendant's employees. As stated, the application of pressure to the uterus of a mother in labour is to assist in the birth process. It is a medical procedure and must be performed by a person with the necessary knowledge and skill. To allow an untrained person to perform such a procedure would clearly fall short of the required standard of care expected in the circumstances.

[52] The importance of any negligent application of fundal pressure to the plaintiff's case arises from the fact that there was no identifiable sentinel event from the evidence that could have been the cause of PN's injury, and from the acknowledgment by the expert witnesses, that the fact that such an event is unidentifiable, does not mean that an acute unanticipated hypoxic-ischaemic

incident did not occur. According to Dr Cooper, a sudden onset of bradycardia without an obvious sentinel event is recognised, and is largely unexplained, and in the majority of cases it is not possible to determine when it started and for how long it continued. Dr Hofmeyer in her evidence further agreed that it cannot be excluded that a marginal placenta abruption may have occurred without it having been detected. This is consistent with the evidence of Prof Kirsten in the summary of his evidence, that without a placental histological evaluation, which is a costly investigation, having been done, such an event is not always clinically evident from a mere placental inspection.

[53] The evidence of fundal pressure therefore serves to provide an event that may be identified as having caused the injury sustained by PN. According to Prof Kirsten the incorrect application of pressure on the fundus of the uterus during the second stage of labour that is excessive may pose a risk of injury to either the mother or her foetus. Excessive pressure may compress the placenta and umbilical cord, and increased intra uterine fundal pressure may lead to alterations in foetal cerebral blood flow, which may diminish blood flow to the foetal brain. Prof Cooper agreed that the use of excessive and prolonged fundal pressure had the potential to increase intrauterine pressure, and as a result intra-cranial pressure, which may possibly impair cerebral blood flow in the foetus. This would be damaging to the foetus, from which it would not recover.

[54] This evidence of the expert witnesses is based on the assumed fact that fundal pressure was applied to the plaintiff, and that it was excessively applied. The plaintiff's evidence, suggesting the application of fundal pressure was denied by Sister Minnaar. Although she had no actual recollection of the plaintiff's labour and the birth of PN, Sister Minnaar testified that she had no knowledge of the use of uterine fundal pressure during childbirth at the time, and that she would not have allowed an untrained person to assist in the labour of a patient. This is a factual issue that must be resolved by applying the principles which apply to the adjudication of mutually irreconcilable versions.

[55] The technique generally employed by the courts in resolving factual disputes of this nature, was summarised as follows in SFW Group Ltd and Another v Martell ET CIE & Others<sup>37</sup>:

"To come to a conclusion on the disputed issues a court must make findings on (a) the credibility of the various factual witnesses; (b) their reliability; and (c) the probabilities. As to (a), the court's finding on the credibility of a particular witness will depend on its impression about the veracity of the witness. That in turn will depend on a variety of subsidiary factors, not necessarily in order of importance, such as (i) the witness' candour and demeanour in the witness-box, (ii) his bias, latent and blatant, (iii) internal contradictions in his evidence, (iv) external contradictions with what was pleaded or put on his behalf, or with established fact or with his own extracurial statements or actions, (v) the probability or improbability of

<sup>&</sup>lt;sup>37</sup> 2003 (1) SA 11 (SCA at para [5]. See also National Employees general Insurance Company Ltd v Jagers 1984 (4) SA 437 (E).

particular aspects of his version, (vi) the calibre and cogency of his performance compared to that of other witnesses testifying about the same incident or events. As to (b), a witness' reliability will depend, apart from the factors mentioned under (a) (ii), (iv) and (v) above, on (i) the opportunities he had to experience or observe the event in question and (ii) the quality, integrity and independence of his recall thereof. As to (c), this necessitates and analysis and evaluation of the probability or improbability of each party's version on each of the disputed issues. In the light of its assessment of (a), (b) and (c) the court will then, as a final step, determine whether the party burdened with the onus of proof has succeeded in discharging it. The hard case, which will doubtless be the rare one, occurs when a court's credibility findings compel it in one direction and its evaluation of the general probabilities in another. The more convincing the former, the less convincing will be the latter. But when all factors are equipoised probabilities prevail."

The plaintiff's evidence was less than satisfactory. On an analysis thereof, it [56] is characterised by a lack of detail and specificity, and it left the impression that she was determined to establish an absence of care by, and attention from the midwifery staff. It must be accepted that she was asked to testify about events that had taken place some ten years earlier. However, at the same time, the plaintiff was adamant that she had not told the hospital staff on her admission to the hospital that her labour pains had started at about midday on the day in question. One can hardly think of a reason for the person who completed the necessary forms on admission to have written time down the time, if he or she did not receive that information from the plaintiff herself. Having then placed the time aspect in issue, the plaintiff does not say what, if anything, she told the hospital staff upon her admission at the hospital. She was asked whether or not she was told during labour to push. Her answer was that "There was no such, and she was only told to walk up and down."

[57] It is highly improbable that she was not assisted during labour by being told what to do. It is inconsistent with the care she, on her own evidence as the

questioning progressed, had received from the midwifery staff before she was moved to the labour ward. It is equally inconsistent with the clinical notes recorded by the midwives. As stated, there is no reason to doubt that these notes, for the most part provide an accurate account of the plaintiff's labour. The clinical notes describe the plaintiff as having been uncooperative and displaying poor maternal effort. The notes do not bear out the suggestion in the plaintiff's evidence that the midwives were not rendering her much assistance while in the labour room; that the only instruction she received was for her to be placed on a bed; and that during active labour, she was told to push. This suggestion is inconsistent with the midwives monitoring the progress of the plaintiff's labour and keeping meticulous record thereof. It is also inconsistent with the plaintiff's concessions in cross-examination that shows that she was told to regulate her breathing and that she was vaginally examined every 2 hours.

[58] The plaintiff's evidence that a male security guard was called into the labour room to assist in the delivery does not have the ring of truth to it. The suggested conduct of the midwives is inconsistent with the otherwise professionalism that is reflected by their recording of the plaintiff's labour. The incident, as it was described by the plaintiff, raises numerous questions, such as the role played by the second midwife in the delivery of PN. According to the plaintiff the one midwife was at her feet. The second midwife was by her side. What the second midwife was doing at the time is not stated. There does not appear to have been any obvious reason for asking for the assistance of a third person, particularly an untrained male person who had no reason to be in a female delivery ward.

[59] The plaintiff's evidence was further that the security guard informed her that the midwives were to perform an episiotomy. The probability of this evidence is questionable, more so in the face of the contradictory instruction that was given to Prof Nolte, the plaintiff's expert witness, namely that the male person was called after an episiotomy had already been performed. The plaintiff's emphatic denial of this proposition is in conflict with the probability that the midwives would have sought the drastic intervention suggested by the plaintiff's evidence before they had first made an attempt to assist the delivery of PN by performing an episiotomy.<sup>38</sup> What detracts further from the reliability of the plaintiff's evidence is that she acknowledged in cross-examination to have had no concept of time, and that she had experienced severe pain that became unbearably worse towards the end of her labour.

[60] The fact that the plaintiff was consistent in her claim that a security guard exerted pressure on her abdomen during labour is in my view not on its own sufficient to render that evidence reliable when measured against the defendant's evidence on this aspect as a whole. As stated earlier, Sister Minnaar, for understandable reasons, had no independent recollection of the plaintiff's labour. I have found no reason to doubt her honesty as well as the reliability of her evidence. The fact that she had no precise recollection of the facts pertaining to the plaintiff's labour, is irrelevant.<sup>39</sup> Her evidence was informed by the clinical notes kept by her

<sup>&</sup>lt;sup>38</sup> An episiotomy is an incision that is made at the opening of the vagina during childbirth to assist with the delivery of the child.

<sup>&</sup>lt;sup>39</sup> AM and Another v MEC for Health, Western Cape supra at para [58].

and the usual or normal practice followed by her in a delivery.<sup>40</sup> She testified that before having completed an advanced midwifery course in 2015/2016 she was not aware of the procedure of applying fundal pressure.

Sister Minnaar's evidence that the procedure was unknown to her at the time [61] of PN's birth is consistent with the evidence of Prof Kirsten that the application of fundal pressure was not taught at medical or nursing schools, and the evidence of Prof Nel, that fundal pressure, as a technique that is actively used, is only found occasionally amongst older nurses. It is also consistent with Prof Kirsten's evidence that the exercise of fundal pressure may result in physical injuries to both the mother and the foetus, none of which was present in this matter. Further, and in any event, the need to apply such a drastic measure of intervention such as fundal pressure is also not suggested if regard is had to the time that elapsed between the plaintiff being fully dilated and starting to bear down, and the birth of PN. The presence of a caput is not necessarily indicative of the application of fundal pressure. Prof Nolte in her

<sup>&</sup>lt;sup>40</sup> See AM and Another v MEC for Health, Western Cape supra at para [58].

evidence acknowledged that with pushing in the last stages of labour, the caput could become larger.

[62] It was submitted on behalf of the plaintiff that an adverse inference must be drawn from the failure of the defendant too call Sisters Bosman, Laminie and Dr van der Walt as witnesses. Whether such an inference must be drawn, must be determined in the circumstances of each case. The inference that a witness was not called because the party concerned feared that to do so would expose facts unfavourable to him or her, may be displaced by an explanation which makes some other hypothesis a more natural one that the party's fear of exposure.<sup>41</sup> Considerations which militate against the drawing of such an inference against the defendant, are the following: The defendant advanced an unchallenged and acceptable explanation for not calling the witnesses. They are no longer employed by the defendant. Attempts made by the defendant to find them were unsuccessful.

<sup>&</sup>lt;sup>41</sup> Wigmore on Evidence Vol II at page 192. See also Brand v Minister of Justice and Another 1959 (4) SA 712 (A) and Raliphaswa v Mugivhi and Others 2008 (4) SA 154 (SCA).

It is unlikely that due to the passage of time they would have been better placed than Sister Minnaar and able to give evidence from memory.

[63] There is further nothing to suggest that any one of the two was likely to give evidence contradicting Sister Minnaar, or evidence that may be adverse to the defendant. The importance of the existence of the contemporaneous notes and/or the notes made soon after the resuscitation of PN, cannot be overlooked. These were records kept in the ordinary course of business. It provides the best independent evidence of the conduct of the hospital staff and the care given during and after the plaintiff's labour. It has not been suggested that there was a real likelihood that any of the two persons concerned would have been able to add to the documentary evidence, either in favour of the plaintiff or against the defendant. The submission went no further than that they could have provided valuable evidence had they testified. A suggestion that either of the two persons may have been in a position to give evidence favourable to the plaintiff would equally have placed a duty on the plaintiff to call them as a witnesses. Accordingly, and in my view, this is not an appropriate case to conclude that an adverse inference should be drawn against the defendant for the failure to call the other midwives and/or Dr van der Walt.

[64] In the result, and on the evidence as a whole, I find that the evidence of the plaintiff of fundal pressure is against the probabilities and the weight of the evidence. It is accordingly not necessary to consider whether fundal pressure was a factual cause of the intrapartum injury sustained by PN. It is a question to which the answer is not straightforward and would amount to speculation. The likelihood of that having been the cause of the injury was disputed by the defendant's expert, Dr Nel. Prof Kirsten's evidence on this aspect was founded on a number of assumptions, one of which was that the foetus was in an already weakened state that would have made it more difficult for it to cope with the interrupted blood flow and intracranial pressure that Prof Kirsten opined was a likely cause of the injury. As stated earlier, there is insufficient evidence to conclude that the foetus was distressed in the first stage of labour, or that the labour was prolonged and may have caused the foetus to have been unable to cope with the catastrophic event shortly before birth. A further difficulty regarding causation is that there is no evidence of excessive fundal pressure. The plaintiff did not testify on the extent of the pressure she said was applied to her abdomen. In conjunction with Prof Kirsten's acknowledgement that there was no physical evidence of injuries to either the plaintiff or PN, it leaves an insufficient basis for the assumed fact of excessive pressure on which Prof Kirsten's evidence was premised.

[65] That brings me to the resuscitation of PN after birth. The submission advanced on behalf of the plaintiff was that the midwives were negligent in their efforts to resuscitate PN who was born cold, pale, not breathing spontaneously, and not reacting to stimuli. Not specifically pleaded, the grounds of negligence relied upon in argument, were developed with the production of evidence. In their clinical notes the midwives did not record that they had performed cardiac massage on the child. Sister Minnaar, confirmed in her evidence, that if it was not recorded, it would mean that cardiac compressions were not performed. Prof Kirsten's evidence was that this meant that blood circulation was never stimulated, and it would have

rendered the resuscitation efforts of the midwives ineffective. The second ground was based on the *viva voce* evidence of Sister Minnaar in explaining, and in response to questions put to her in cross-examination how facemask ventilation would have been performed. According to Sister Minnaar, this manner of ventilation would be done for thirty seconds and would then be interrupted for thirty seconds in order for the midwife to check the newborn's heart rate. With reliance on this, and the evidence of the defendant's expert witness Dr Nel in cross-examination, that ventilation must continue while the heart rate is monitored, it was submitted that the resuscitation of PN was poorly conducted, and that it provides an explanation for the persistent poor condition of PN found upon the arrival of the paediatric doctor, Dr van der Walt, ten minutes after birth.

[66] The basis of Prof Kirsten's opinion that the midwives' resuscitation was poorly performed is the fact that, according to Dr van der Walt's notes, she administered a number of doses of adrenalin to PN after her arrival in the labour ward. This, according to Prof Kirsten can only mean that PN had a bradycardia; that

the adrenalin was administered to increase PN's heartrate; and that the Apgar scores allocated by the midwives were incorrect. This is a factual inference of the existence of a slow heartrate, and is in conflict with what both the midwives and Dr van der Walt had recorded PN's heartrate to have been, namely 120 beats per minute. A heartrate of 120 beats per minute, Prof Kirsten opined, was inconsistent with the condition of PN at birth, and the fact that Dr van der Walt found it necessary to administer adrenalin. The evidence of Prof Cooper on the other hand was in essence to the effect that the inference that the heartrate must have been incorrectly recorded, is not the only inference to be drawn from the facts. His evidence was that studies have shown that a newborn that had a prolonged period of severe asphyxia may still have a heart rate of above 100. A slow heart rate is one that is below 80 beats per minute, and cardiac compressions are indicated if the heartrate is below 60 beats per minute. That the medical personnel incorrectly recorded PN's heartrate as Prof Kirsten in his evidence seeks to suggest in support of his proposition that PN's heartrate was at 60 beats per minute that would have necessitated heart compression, is therefore not the only inference that can be drawn. Where there is a conflict in the

evidence of Prof(s) Kirsten and Cooper on this aspect, I prefer the evidence of the latter. It is reasoned and based on studies, which have been performed. Prof Kirsten was inflexible in his view with what he regarded to be the facts on this aspect and displayed a general unwillingness to move from the position he took in his report.

[67] The suggested inference in Prof Kirsten's evidence must be weighed against the probability that both the midwives and Dr van der Walt would have made the same mistake by incorrectly recording PN's heartrate. An aspect that militates against the probability of such a mistake having been made, is that Dr van der Walt, where she had incorrectly recorded information in her notes, she corrected it. This is indicative of her having applied her mind to what she recorded, and what she was required to record. Prof Cooper acknowledged that it was inexplicable why Dr van der Walt chose to administer adrenalin, and that a heartrate of 120 beats per minute should be adequate for perfusion. It however had the effect of increasing the heart rate from 120 to 180 beats per minute. That Dr van der Walt may have thought it necessary to increase the heartrate under circumstances that were less than ideal, as

opposed to making an incorrect entry of the measurement of the heartrate, cannot be excluded in the circumstances. That the Apgar scores may have been incorrect is raised no higher than it being a possibility. On Prof Kirsten's own evidence, it is a method of recording a newborn's condition. It has limitations, as it is subject to subjective interpretation, in that studies have shown that doctors and midwives would allocate different scores. I am accordingly not convinced that the evidence of adrenalin having been administered by Dr van der Walt is sufficient to displace the objective evidence of a heartrate of 120 beats per minute as recorded in the clinical notes made by both the midwives and Dr van der Walt.

[68] That leaves the submission that the midwives were negligent in the manner in which they performed the face mask ventilation of PN for the ten minutes until the arrival of Dr van der Walt. As stated, it arose from the evidence of Sister Minnaar when she was asked in cross-examination about the manner in which face mask ventilation is performed. Its development as an issue with regard to the element of negligence subsequently went no further than a question put to Dr Nel in crossexamination whether "you stop the bagging to check the heartrate", and his response thereto of, "No ... never." It was not canvassed as an issue for determination during the evidence of any of the other expert witnesses who were qualified to express an opinion on what would constitute negligent conduct on the part of the midwives in this regard. I am consequently not satisfied that the witnesses were given a full opportunity to deal with this aspect, and that I was placed in a position to make an informed decision.

[69] If it is assumed in favour of the plaintiff that the resuscitation of PN by the midwives of PN after her birth was negligent in the manner suggested, the question is then whether such negligence is causally connected to the injury sustained by PN. In view of the fact that it is accepted that PN sustained the injury intrapartum, the question in this context is whether the negligent conduct relied upon contributed to an already existing injury. Causation in delict is comprised of the two component elements of factual and legal causation. Factual causation is the expression of the relationship that must be found to exist between the negligent act and the injury

sustained by the plaintiff in a case. The general test for factual causation is the "but for" test. The plaintiff bears the burden of showing that, "but for" the negligent act or omission of the defendant, the injury would not have occurred.<sup>42</sup> It is not sufficient to demonstrate the mere possibility of a causal connection, or to prove causation by way of speculative evidence. However, this does not mean that the test for causation must be applied rigidly.<sup>43</sup> It also does not require factual causation to be determined with scientific precision.<sup>44</sup> The reasons for this, which is often overlooked, lies in the manner of proof of factual causation as a requirement of the substantive law for delictual liability. It requires a finding based on the legal standard of proof, and not a higher standard that requires proof with any scientific precision. The burden of proof and how it is discharged is determined by the principles of the law of evidence. The burden of proof in a civil case requires a plaintiff to prove his case no higher than on a balance of probabilities.<sup>45</sup> The

 $<sup>^{\</sup>rm 42}$  Lee v Minister of Correctional Services 2013 (2) SA 144 (CC) at para [39] to [40].

<sup>&</sup>lt;sup>43</sup> Lee v Minister of Correctional Services supra at para [44].

<sup>&</sup>lt;sup>44</sup> Oppelt v Department of Health, Western Cape supra at paras (36) to (38). See also Minister of Safety and Security v Van Duivenboden 2002 (6) SA 431 (SCA); Minister of Finance and Others v Gore NO [2007] (1) SA 111 (SCA) and AN obo EN v MEC for Health, Eastern Cape [2019] ZASCA 102 (15 August 2019) at para [7]. <sup>45</sup> Ocean Accident and Guarantee Corporation Ltd v Koch 1963 (4) SA 147 (A) at 157 C – D and Blyth v Van den Veen 1980 (1) SA 191(A) at 2088.

probabilities are determined upon the facts and an element of experience and common sense.<sup>46</sup> Applying the standard of proof to the test for factual causation, the enquiry is directed at identifying the more probable of any one cause against the backdrop of the negligent act found proved, including the available evidence as a whole, which in a matter such as the present, will include, but is not limited to, expert opinion.

[70] The first problem with a finding of factual causation in the present matter, is that on the evidence it cannot be said that the interrupted ventilation necessarily meant that there was inadequate resuscitation, thereby raising the probability that it prolonged the hypoxic ischemic event. This aspect was not canvassed with, or dealt with, by any of the expert witnesses. It leaves an inadequate factual basis from which to draw the inference that it contributed to PN's injury. The second aspect is that there are numerous objective considerations which militate against the probability that PN's injury was aggravated. It is evident from the evidence, and acknowledged

<sup>&</sup>lt;sup>46</sup> Za v Smith and Another [2015] 3 All SA 288 (SCA) at para [30].

by the expert witnesses, that at birth PN was, what was described as, in a "severely compromised condition", and that she sustained a severe intrapartum insult. This is consistent with the observations of the midwives as recorded by them in their clinical notes. Further, the interrupted ventilation was for a relatively short period of time during which steps were taken to resuscitate PN, and whereafter, upon the arrival of Dr van der Walt, she was intubated<sup>47</sup> and adrenalin was administered. Prof Cooper's evidence was that the fact that PN was recorded as gasping at the time of Dr van der Walt's arrival in the labour ward is consistent with secondary apnoea. The onset of gasping from a point of no breathing, according to him, was indicative of an improvement in the condition of PN that would have continued to improve until there was normal breathing. It is consistent with experiments and studies performed. This, according to Prof Cooper, was indicative of the resuscitation attempt of the midwives having been helpful.

<sup>&</sup>lt;sup>47</sup> The placing of a tube down the trachea for direct supply of oxygen to the lungs.

[71] I am accordingly not persuaded that on the assumed fact of negligent conduct of interrupted ventilation, it was proved that it contributed to an already existing severe injury to the brain of PN. In the result I find that the plaintiff has failed to prove, on a balance of probabilities, causative negligence on the part of the defendant's medical staff at the hospital, and accordingly the action must fail. The defendant does not seek an order for costs against the plaintiff.

[72] In the result the plaintiff's claims are dismissed. There will be no order to costs.

D VAN ZYL DEPUTY JUDGE PRESIDENT

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