AFRICAN FAMILIES' PERCEPTIONS OF TRAUMATIC BRAIN INJURY IN THE CAPRICORN DISTRICT, LIMPOPO PROVINCE: AN AFROCENTRIC PERSPECTIVE

by

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DECLARATION

I declare that **AFRICAN FAMILIES' PERCEPTIONS OF TRAUMATIC BRAIN INJURY IN THE CAPRICORN DISTRICT, LIMPOPO PROVINCE: AN AFROCENTRIC PERSPECTIVE**, is my own work and all the sources I have used or quoted have been acknowledged in the reference list.

……. **……**

Signature **Date**

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DEDICATIONS

This dissertation is dedicated to all the participants more especially the TBI victims

SUMMARY

This study investigated the perceptions of African families of TBI. Caregivers and TBI victims were given the opportunity to talk about their TBI perceptions. The study revealed that people's knowledge of TBI is not good. This is proven by the way in which the participants understood and explained the conditions the victims found themselves in, after the accidents and how their family members are. Findings reveal that culture does play a vital role in the perceptions of African people. The study illustrates that the perceptions are culturally-rooted. The study interviewed five individuals (n=5) with TBI and a total of nine caregivers (n=9) were interviewed. A total of fourteen (n=14) participants were interviewed.

The study reveals that the causes of TBI were attributed a number of things. According to the participants TBI is caused by witchcraft, the will of God and ancestors. The study also helped highlight the beliefs and the cultural system of Africans. It also explained the reality of an African. The Afrocentric theory helped shape the study as it helped in explaining the importance of an Africans' view. The Afrocentric theory postulates that Africans have a different reality from that of Westerns and it has been proven by the findings. Although the participants were told about TBI by the doctors, they still had their own explanations and attributions to the problem.

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LIST OF ABBREVIATIONS AND ACRONYMS

TBI – Traumatic Brain Injury

MVA – Motor Vehicle Accidents

LOC – Loss of consciousness

PTA – Post-traumatic Amnesia

GCS – Glasgow Coma Scale

CHAPTER 1

INTRODUCTION

1.1 Introduction

Little is known about how people from different cultures experience and understand traumatic brain injury (TBI) and the process of brain injury rehabilitation (Simpson, Mohr & Redman, 2000). According to Akpomuvie (2014), different ethnic groups and cultures recognize different illnesses, symptoms and causes. According to Vaughn, Jacquez and Baker (2009), different cultural groups have diverse belief systems with regard to health and healing in comparison to the Western biomedical model of medicine and this is because African thought exists and differs from Western thought in that Western thought generally ignores the spiritual dimension of phenomena and focuses on the visible, measurable physical reality (Van der Walt , 1997).

According to Webster, Taylor and Balchin (2015), TBI can require a long and arduous recovery process. Many survivors are left with permanent physical, emotional and cognitive disabilities. According to Mokhosi (2000), brain injury is a medical problem that warrants intensive study and little research has been done in disadvantaged communities.

1.2 Problem statement

Traumatic Brain Injury (TBI) is one of the main causes of traumatic mortality and long-term disability (Javouhey, G'uerin & Chiron, 2006). An estimate of 89 000 cases of new TBI are reported annually in South Africa. The three most common causes of a head injury are: motor vehicle, bicycle, or vehicle-pedestrian mishaps (more than 50%), falls (approximately 25%) and violence (nearly 20%) (Department of Health, 2010). South Africa has some of the worst road traffic injury statistics in the world.

Each year, millions of people are killed or injured on our roads. It is highlighted that the road fatalities have increased by 14% between 1 December 2015 and 11 January 2016 there were 1755 fatalities on South African roads, which indicates an increase of 220 deaths from the 1535 deaths in the 2014/2015 festive period (SADD, 2016). These figures indicate that motor vehicle accidents cause the most TBI cases. However, many of those who these accidents survive live with impaired brain function. This places a considerable burden on society, not only in terms of high economic costs but also in terms of the other effects of the trauma on individuals and their families (Riggio & Wong, 2009). In South Africa females road traffic accidents produced the highest rate of TBI compared to males where it was the second highest. These rates were higher in developed provinces such as the Western province, Gauteng and Mpumalanga (Kalyan, Nadasan & Puckree, 2007). The outcome of TBI is influenced not only by the severity of brain injury but also by the factors such as premorbid mental activity, the individuals level of education, premorbid personality and social adjustment, cultural factors and socio-economic resource (Lezak, Howieson & Loring, 2004).

This research uses the Afrocentric perspective which locates research from the African viewpoint and creates Africa's own intellectual perspective. It focuses on Africa as a cultural centre for the study of African experiences and interprets research data from the African perspective. This perspective should be understood in the context of multicultural realities of South Africa (Mkabela, 2005). According to Asante (2009), Afrocentricity is a paradigm based on the idea that African people should re-assert a sense of agency, because the African experience is different from the European experience (Mazama, 2001).

While it is apparent that there have been many quantitative studies done on the neuropsychological aspects of TBI (Guilmette & Paglia (2004); Javouhey et.al (2006); Ord, (2007) & McKinney,(2012) and there are few qualitative studies (Al-Adawil, Al-Busaidi, Al-Adawi & Burke, 2012) done in Non-Western contexts on the perceptions of different cultures' understanding of traumatic brain injury in their families. Although there is literature that is from South Africa focusing on TBI, it does not look at TBI from a cultural perspective. Thus, this methodological gap generates a need for research on this topic using a qualitative methodology in order to gather

in-depth information on African families' perceptions of TBI in the Capricorn District of the Limpopo Province.

1.3 Purpose of the study

1.3.1. Aim of the study

The aim of the study is to explore the knowledge of TBI and the ways in which African families and TBI victims in the Limpopo Province, perceive TBI.

1.3.2. Objectives of the study

- To determine the ways in which the families of TBI victims perceive TBI and its effects.
- To investigate the knowledge of TBI and its consequences amongst the families of the TBI victims.
- To investigate the knowledge and perceptions of TBI amongst TBI victims.

1.4. Research Questions

- How do the families of the TBI victims perceive TBI and its effects?
- What do the families of the TBI victims know about TBI and its consequences?
- What do the TBI victims know about TBI and how do they perceive TBI?

1.5. Motivation of the study

The emotional and behavioural aspects of traumatic brain injury the patient represent, is one of the major problems for their personal, family and vocational lives (Riggio & Wong, 2009). According to Mokhosi and Grieve (2004), in African families, there are strong feelings of loyalty and obligation to support a family member who has sustained TBI. However, a culturally informed perspective is vital in

understanding the culturally unique needs and care-giving of the victim. Thus, this study envisages to help shed more light on this aspect.

1.6. Significance of the study

The current study seeks to more insight in the perceptions of TBI and (their consequences) held by the families of TBI victims living in rural African communities. The study aims to help in the understanding of TBI from an African standpoint, particularly the cultural aspects. Furthermore, the study will document findings of perception of TBI of victims and caregivers from a non-Western population. The study will shed more light to medical and traditional practitioners and the Department of Health on African families' perceptions of traumatic brain injury, which can be incorporated into their treatment plans.

1.7. Operational definitions

1.7.1. Perceptions

According to Moseya (2009), what people perceive might be different from the objective reality. In many instances, people's perceptions of an object might also be similar or different. The reason people may perceive the same thing differently can reside in the perceiver, in the object perceived or in the situation in which the perception is made.

For the purpose of this study, perceptions refer to the ways in which people think of and about TBI.

1.7.2. Traumatic Brain Injury

Traumatic Brain Injury (TBI) is a traumatically induced structural or physiological disruption to the function of the brain as a result of external forces (Silver, McAllister & Yudofsky, 2011).

For the purpose of this study, TBI refers to internal injuries to the brain as a result of motor vehicle accident and has been diagnosed as such by a medical practitioner.

1.7.3 African Families

For the purpose of this study, African families refer to families that live in the rural communities of the Limpopo Province and are still living according to their cultural ways. These families still conform to their cultural expectations. Their behaviours, thinking, beliefs and lifestyles are inclined to their culture.

1.8 Conclusion

This chapter summarised the conception of TBI and its consequences. It also elaborated on the aims and objectives of the study as well as protocols which were observed in the study.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Introduction

The Afrocentric theory was developed to have a clear understanding of Africans (Asante, 1990). It seeks to explain a phenomena through the standpoint of an African. The focus of the study is the African perspective on TBI. Asante (1990) came up with the idea of Afrocentricity because he felt that there was a need for an Afrocentric orientation to data. African people should re-assert a sense of agency in order to achieve sanity (Asante, 2009) so that they have control of their lives and attitudes about the world. Afrocentricity centers on placing people of African origin who should be in control of their lives and attitudes about the world. This means that they (Africans) examine every aspect of the dislocation of African people, culture, economics, psychology, health and religion (Asante, 1991).

Mazama (2001) also studied the Afrocentric paradigm and mentions the core cultural African characteristics as (a) the centrality of the community, (b) respect for tradition, (c) a high level of spirituality and ethical concern, (d) harmony with nature, (e) the sociality of selfhood, (f) veneration of ancestors, and (g) the unity of being. Keto (1995) contends that the Afrocentric paradigm provides a framework for the process of centering knowledge about Africans, at home and abroad, on the experience of Africans as subjects of history who occupy center stage in the construction of knowledge about Africans.

2.2 Theoretical Framework

Asante (2005) argues that Afrocentricity is a quality of thought, practice and perspective that perceives Africans as subjects and agents of a phenomena acting in their own cultural image and human interest**.** Afrocentricity creates a proper understanding of Africans through their cultural value systems. Cultural value systems make cultures distinct from one another. Cultural values define and make a culture. Every culture has its own set of rules, beliefs and views or perceptions. According to Asante (1991), Afrocentricity is an aspect of centrism, its groundedness, which allows the study of human culture from the standpoint of an African. Asante (2005) states that the central concern of Afrocentricity is to advance the position of African people in the world by affirming their identity and contributions, and by unmasking the biases and limitations of Western culture. In agreement Mazama (2001) asserts that Afrocentrism also means viewing the Western voice as just one among many and not the wisest one. According to Asante (1992), Afrocentricity is concerned with African people being subjects of historical and social experiences rather than objects in the margins in European experiences.

According to Asante (2009), there are five characteristics of the Afrocentric method namely; (1) the Afrocentric method considers that no phenomena can be apprehended adequately without locating it first, (2) a phenomena should be diverse, dynamic and in motion and therefore it is necessary for a person to accurately note and record the location of phenomena even in the midst of fluctuations, (3) the Afrocentric method is a form of cultural criticism that examines etymological uses of words and terms in order to know the author's location, (4) to uncover the masks behind the rhetoric of power, privilege, and position in order to establish how principal myths create place, and (5) to locate the imaginative structure of a system of economics, bureau of politics, policy of government, expresssion of cultural form in attitude, in direction and language of the phenom, be it text, institution, personality, interaction, or event.

Afrocentricity is about the way in which African people represent the African culture. The ways in which African people think and perceive things is a representation of their culture. Africans have different beliefs from those of other cultures. The beliefs

of any culture have an influence on their thinking or the way they perceive things. Afrocentricity promotes the African culture, in a way that Africans must keep their African roots and not abandon them by adapting other cultures. Mazama (2001) supports this by mentioning that the main problem with African people is the adoption of the Western worldview and perspective and their attendant conceptual framework. However, this study does not discredit the Western worldview and perceptions but puts an emphasis on the perceptions and experiences of Africans. Mazama (2001), futher avers that the Afrocentric idea rests on the assertion of the primacy of the African experience for African people. This study focuses on Africans' viewpoint of TBI. Africans have their own beliefs and set of rules according to which they live. Looking at TBI from the African viewpoint brings a different view point from that of the Western culture. TBI is widely documented from the Western viewpoint therefore this study seeks to look at it from the African perspective and Afrocentricity helped do that.

The beliefs of the Africans are best understood from the Afrocentric perspective because the perspective allows for an African to be an African. Many aspects of an African's beliefs are considered in the study, as their beliefs form a great part of their everyday life. African people's beliefs have an effect on their thinking, opinions and/or perspectives. Using the Afrocentric perspective has helped look at every aspect of this study 'with the eye' of an African. The African culture was the guide in the study. Afrocentric perspective helps the Africans have a view point and a voice. It allowed Africans to give a clear explanation of what they are about. According to Mazama (2001), Afrocentricity places Africa at the center of African people's world and celebrate their own culture. According to Ntseane (2011), the African paradigm can be used to identify African cultural values which will acknowledge and accommodate the Africans' value systems and their understanding of reality.

TBI is damage to the brain that leaves a person with symptoms that range from mild to severe. People with severe TBI are the ones with the major damages to their brains and any damage to the brain leads to complications that are physical, psychological or neurological. These complications often lead to symptoms and disabilities and this is from a western and/or medical perspective but to an African, TBI might be an almost non-existing illness because; people of diverse cultural

backgrounds often make different attributions of illness, health, disease, symptoms and treatment.

2.3 The Affective, Cognitive, and Conative Aspects of the Afrocentric Paradigm

African ideals and values are the measure of African people's lives. According to Mazama (2001), the organising principle that determines the perception of all reality is the centrality of the African experience for African people. Afrocentricity questions an African's approach to every imaginable human enterprise like the approach Africans make when reading, writing, jogging, running, eating, keeping healthy, seeing, studying, loving, struggling and working. According to Mbiti (1990), African philosophy is the understanding, attitude of mind, logic, and perceptions behind the manner in which African people think, act, or speak in different situations of life. According to Waghid (2013), the African perception of reality is determined by a history, geographical circumstances and cultural phenomena such as religion, thought systems and linguistic conventions entrenched in African worldview.

Afrocentricity places African values and ideas at the center of African life and it promotes cosmology, aesthetics, axiology, and epistemology that characterize African culture (Mazama, 2001). This is supported by Baloyi and Makobe-Rabothata (n.d) who state that, worldviews and cultural systems are by nature biased towards other cultural value systems. The world view of African people can be conceptualized along the following dimensions: (1) cosmology (i.e., the structure of reality) which may be grounded in interdependence, collectivism and harmony with nature. (2) ontology (i.e., the nature of being and reality) where there is recognition of the spiritual bases of nature, one's existence, and the universe. (3) axiology, the primary importance of human to human interaction as a value system and, (4) epistemology, a system of truths and a method for revealing or understanding truth or generating knowledge.

According to Mawere (2011), Africans have a common general orientation and perception of reality, a domain whose existence is explained mystically and not empirically.An African's strongest belief is in their cosmology. This belief influences

their understanding of reality. Africans have a hierarchy of existence with God at the top followed by ancestors and down to human-beings.

The African worldview stems from the belief in an indivisible and inexhaustible relationship between God, mankind and cosmos. The relationship forms part of the community, social, the political, the educational, the moral and the psychological dimensions of African life. The use of symbols, rituals, and myths is the major epistemological process. African symbols, rituals and myths are pregnant with meaning. They serve as models of behaviour, models of living, thought and of understanding reality. The African symbols, rituals, and myths serve an important role in African thinking. They constitute as both the epistemological form and an ontological statement, they reinforce the community's corporate reality, the physical reality, as well as the spiritual and mental reality (Frye, Harper, Myers, & Traylor, 1983).

According to Bakari (1997), African epistemology places great emphasis on spirituality and involves an understanding of the world through a spiritual source. No reality exists without a spiritual inclination. The universe, nature, humans, and the spirit are considered as one. African epistemology also involves the use of symbolic imagery. The use of symbols is a means of conveying a precise rationale. The symbols are the objectification of the subjective subliminal nature of Africans. Afrocentric epistemology is rooted in spirituality, communalism, cooperation, ethics, and morality.The way of life and daily activities are based on empirically verifiable facts, independent of supernatural influence. In African metaphysical thinking cause also plays a pivotal role. The view of an African on cause is the key to understanding African metaphysics. There is a difference between the Western view of causality and the African view of causality (Coetzee & Roux, 2003).

2.4 Afrocentricity and African spirituality

According to Ntseane (2011), spirituality in the African context is participation that is influenced by the metaphysical world. It results in a sense of obligation to the community and it is translated in spiritual obligation to one's ancestors and a

physical obligation to take care of extended family. Spirituality is a connectedness to the earth and all its inhabitants, including animals, birds, plants, and the spirits (*badimo*) and this connectedness is embraced, relived and celebrated through taboos and totems. The concept of spirituality promotes interdependence and partnership, personal integrity and commitment to service.

According to Baloyi and Makobe-Rabothata (n.d), from the African perspective, through death, there is a natural transition from the visible to the invisible spiritual ontology where the spirit, the essence of the person, is not destroyed but moves to live in the ancestors' spiritual realm. It signifies an inextricable spiritual connection between the visible and invisible worlds.There are basically two kinds of spirits in African reality the benevolent and malevolent spirits. The benevolent spirits are those that bring good fortune to people, even though they could also bring punishment on people based on an atrocity or abomination committed. There are also bad spirits who are not interested in the well-being of people. They are called malevolent spirits (Kanu, 2014).

According to Danner (2013), witchcraft (*Boloi*) is a part of African spirituality. Witchcraft refers to all sorts of sorcery and magic often emphasising destructive evil intentions. Witchcraft rituals are practics in secrecy and often at night. Events are seen in different ways: if someone has a car accident, Western people will say that the person drove too fast or that the brakes were not working or they have failed. An African is likely to mention witchcraft while Western people will try to use psychological arguments to explain what African counterparts considers the influence of ghosts and spirits of ancestors.

Africans believe in ancestors whom they refer to by names such as *badimo*, *amadlozi* and the *living-dead*. They are the closest link African people have with the spiritual world. They are regarded as part of the family and the family members have personal memories of them. Symbolically, they are said to return to their living families from time to time. They enquire about family affairs and may even warn of impending danger or rebuke those who have failed to follow their special instructions, as in for example the process of becoming a traditional healer known as '*go thwasa*' or getting married to someone they do not approve of. They are the

guardians of family affairs, traditions, ethics and activities. An offence in these matters is an offense against the ancestors who act as guardians of families and communities. The spirits of ancestors are believed to possess people. If people fail to give food and libation, where this is the normal practice, or if they fail to observe ancestral instructions, then misfortune and suffering may be interpreted as resulting from anger (Mokhosi & Grieve, 2004).

Mazama (2001) mentions that in many parts of the African world, the dead or the *living-dead* are buried in the family compound, along with many of their belongings, so that they may continue to play a part in their family's affairs. It is also the same reason that Africans offer libations and food to them as gestures of appreciation, hospitality respect. Maintenance of a relationship with the ancestors usually helps in securing protection from them. The ancestors are believed to be in a better position to communicate with God on their behalf. Ancestors are spoken to through dreams or during divination sessions. Communication is made possible by immaterial components. This easy and common communication between the living-dead and the loving is underlined by the reincarnation of the living-dead by their own families. Newborns are frequently thought of as ancestors who come back not as physical entities but as spiritual personalities.

Masango (2006) agrees by mentioning that there is a great belief among Africans that if a person lived a good life and dies, that person according, to African belief system, becomes a good ancestor. He or she is able to connect one to higher powers (Jesus the King), that person is believed to be in heaven. The second belief is that the person is given to another world (eternal life) which explains the fact that when they are buried, food and other important items are buried with them. The final belief is that ordinary human beings cannot speak to God directly because God is not their equal, ancestors become a link between the lower and higher being.

According to Mazama (2002), ancestors are not the only spiritual entities to whom Africans may turn to for assistance. He states that the African spiritual world is populated. The existence of what is referred to as secondary deities is common in Africa and it is in an ontological order that starts from the bottom to the top that we find natural elements, animals, the living, ancestors and then the Supreme Being,

God. The implications of the ontological order are of great importance to African people. Africans are an organic part of the whole that includes diverse spiritual and physical entities. He goes on to mention that Africans cannot think of reclaiming their lives outside of the ontological order because as demanded by Afrocentricity, they are to be whole again. Ancestors are an important factor in the lives of Africans and it seems as if Africans have forgotten that knowing very well that without ancestors Africans are nothing. Africans have turned their backs on their ancestors and have adopted and are embracing other people's gods.

Mazama (2002) states that there has been a desacralisation of the African spiritual space by Christianity as it has taken the importance of African spirituality from African people. Christianity has been part and parcel of the White supremacy to whose demise Afrocentricity is fundamentally committed. The imposition of Christianity is the work of Europeans imposing their experience on other people whose experience and worldview are different.

Africans may differ from one locality to another but they depict God as the Supreme Being and that He created what comprises the universe and that after creating the universe, God lives in it and sustains its inhabitants (Jaja, 2014). In African spirituality, God penetrates all of life and is powerful and provides all that is needed for life, Cilliers (n.d). This is supported by Ekeke and Ekeopara (2010), who states that Africans look at the weather, storms, thunder and lightning, and other phenomena such as day and night, the firmament, the sun, moon and stars, seeing their benefit to man, Africans associate the sky with a great God who is very close to man, supplying man's needs such as rain for his land to produce abundant fruit.

2.5 Conclusion

The present study was guided by the Afrocentric theoretical framework. The Afrocentric perspective involves the placement of African culture, histories, experiences and perceptions as the central axis that re-organizes African frame of reference so that Africans become the centre of analysis and synthesis. The Afrocentric perspective contends that there is a need to safeguard and defend

African cultural values, habits, customs, religions, behaviours and thoughts by ensuring that they are protected and clear of all interpretations that are un-African.

The Afrocentric perspective was therefore considered as an appropriate theoretical framework to understand the perceptions of TBI in African families.

CHAPTER 3

LITERATURE REVIEW

3.1 Introduction

Relevant literature such as expaining TBI from a medical viewpoint and looking at Africans's attributions to illnesses formed part of this chapter. This chapter offers an explanation and understanding of TBI from an African perspective and a medical or western perspective. It endeavours to argue that TBI is a cause of cognitive impairments (Adnams, 2010). In 2011/2012, the Limpopo Province recorded 383 car accidents which resulted in 75 fatalities. For the year 2012 to January 2013, the province recorded 297 car accidents resulting in 71 fatalities. These figures indicate fatalities however, some survivors are likely to have suffered TBI (All Africa, 2013). After sustaining TBI, patients with mild to moderate concussions and most severely injured patients continue to have residual impairments consisting of physical limitations, but also cognitive, social, and behavioural limitations (Benedictus, Spikman & Van der Naalt, 2010). There is also a great possibilty of long-term disability and that the person may never completely regain the old roles, abilities, and attributes (Robertson, 2008). However, families that have never dealt with a

person with TBI and/or have never had TBI and consequences might experience some difficulties understanding the consequences, and implications of TBI. This might pose as a problem when it comes to them taking care of the TBI victim.

In view of the multicultural nature of South African society, with its 11 official language groups, it is important for health care professionals to understand the meanings attached to these conditions by different religious and cultural communities (Ross, 2007). Some cultures, in the Limpopo Province, believe that death, illness or misfortunes are either caused by the ancestors as punishment or by evil spirits and witches (Carstens, 2003). TBI manifests a great number of complications to the person who has sustained the injuries. This brings about a lot of changes in the person's life. TBI is known to change a person's cognitive functions, emotional state, physical state and behaviour depending on the severity. Injuries vary from mild to severe, the severe state being the state that causes the most damages**.** The following section explains causes, mechanisms and neuropsychological impacts of TBI. It will help shed some light on t TBI from a medical perspective.

3.2 Traumatic Brain Injury (TBI)

TBI refers to head injuries that cause a disruption in brain function as a result of physical trauma, as opposed to organic pathologies such as stroke or dementia. Traumatic injuries can be caused by blunt impact, penetrating objects, or by inertial forces such as rapid rotation or acceleration/deceleration. Injuries are referred to as penetrating if the skull and dura are pierced or closed if the dura remains intact. Damage to brain tissue can be caused directly by the forces of impact or by secondary processes set in motion by the injury. The extent and pattern of damage depends heavily on the nature and severity of the injury. TBI severity is typically classified according to initial injury characteristics such as alterations of consciousness, length of coma, post traumatic amnesia, focal neurologic signs, and abnormalities revealed during neuroimaging. While there are some differences among grading systems, these criteria are typically used to classify injuries as mild, mild-complicated, moderate, or severe. Extensive research has shown that these

factors provide an accurate measure of the extent of neuropathology, expected severity of subsequent cognitive impairments, and overall injury-related disabilities (Ord, 2007).

3.2.1. Types of TBI

The two types of brain injuries that a person can sustain are a closed head injury and a penetrating head injury. A closed head injury is sustained when the head of a person is suddenly struck by an object violently but does not break through the skull and a penetrating head injury occurs when the skull is forcefully penetrated by an object and enters the brain tissue of an individual (McKinney, 2012). Types of TBI are closed head injuries and open head injuries. Closed head injuries are caused by blunt forces to the head. Types of closed head injuries are concussions, contusions, diffuse axonal injury and lacerations. Clinical manifestations may include immediate loss of consciousness lasting from minutes and long hours, momentary loss of reflexes, respiratory arrest for several seconds and amnesia for a period before and after the event. According to Zagaria (2004), open head injury results from a foreign object penetrating the bone and brain.

3.2.2. Classification of TBI

TBI is typically classified as mild, moderate, or severe depending on the level of loss of consciousness (LOC) and post-traumatic amnesia (PTA), (Guen, 2011). LOC relates to the duration of an unconscious episode or coma after the moment of the traumatic event. Unconsciousness for 30 minutes or less is often used to define mild TBI, while longer lengths of coma are used to define more severe forms of TBI. PTA refers to an episode of amnesia following the injury. PTA of less than 24 hours indicates a mild TBI, while greater lengths of amnesic episodes define more severe forms of TBI (Malec, Brown, Flaada, Mandrekar, Diehl & Perkins, 2007).

Using the duration of Post-Traumatic Amnesia, to assess severity of injury can be particularly useful. A PTA of under an hour predicts a low risk that there will be long-term neuropsychological problems. At the other end of the spectrum, a PTA of more than a week predicts a high risk of these (Gentleman, 2008). If the post-traumatic amnesia lasts for 10 minutes it correlates with very mild injury, amnesia lasting 10 to

60 minutes corresponds to mild injury, amnesia lasting 1 to 24 hours corresponds to moderate injury, amnesia lasting 1 to 7 days corresponds to severe injury, amnesia lasting more than 7days corresponds to very severe injury (Kolb & Whishaw, 2009). Glasgow Coma Scale (GCS) is the most widely used scoring system for determining a patient's level of consciousness following TBI. Three categories of testing measure best eye opening, best verbal response, and best motor response with combined score ranging from 3 to 15. Mild TBI (GCS=13 to 15), moderate TBI (GCS=9 to 12) and severe TBI (GCS=3 to 8) (Zagaria, 2007).

3.2.2.1. M**ild TBI**

The patient experiences transient loss of consciousness, a brief amnestic period of no longer than sixty minutes and a rapid return to previous level of consciousness. The term concussion is often used to refer to this type of mild brain injury. Concussion is followed by a characteristic group of symptoms that include headache, dizziness and poor concentration and memory (Riggio & Wong, 2009).

3.2.2.2. M**oderate TBI**

With a moderate brain injury, the patient has an alteration in consciousness that persists for more than an hour. If the patient is alert after an injury but demonstrates focal neurologic deficits, the degree of brain injury is considered moderate rather than mild. In moderate brain injury, post traumatic amnesia of about 24 hours is common (Riggio & Wong, 2009).

3.2.2.3.Severe TBI

A patient with very severe brain injury is rendered unconscious and unresponsive immediately or shortly after injury. No communication is present and the patient cannot follow simple instructions and many patients die a few minutes after such an injury, patients who have a persisting coma are thought to have diffuse impact, shearing damage to the white matter and disconnection between cerebral structure and brain stem. A vegetative state is common if the patient improves past vegetative state. Several permanent neurologic deficits are usually present, (Riggio & Wong, 2009).

3.2.3. Causes of TBI

The most common causes of TBI include falls, motor vehicle crashes, and sports-related injuries (Tham, Palermo, Wang, Jaffe, Temkin, Durbin & Rivara, 2013) and this is supported by Tsai, Tsai, Wang, Sung, Wu, Hung and Li (2014) by stating that traffic accidents, falls, sport injuries, and violent assaults as the causes of TBI. According to the National Institute for Occupational Health (NIOH) (2014), approximately 50% of TBIs are the result of motor vehicle accidents or pedestrian vehicle accidents. Falls are the second most common cause of TBI as they make 20-30% of TBI cases. Violence-related incidents account for approximately 20% of TBI cases.

3.2.4. Mechanisms of TBI

Primary injury immediately sets in motion a cascade of secondary inflammatory, oxidative stress, mitochondrial, metabolic and vascular mechanisms that further initiate and perpetuate cellular injury. Secondary brain injury is maintained and worsened by intracranial and extracranial insults, the combined effects of which are multiplicative rather than additive (SAMJ, 2013).

3.2.5. Neuropsychological Sequelae of TBI (consequences of TBI)

3.2.5.1 Emotional problems

People with TBI are often impaired in facial and vocal affect recognition, as well as empathy (Neumann, Zupan, Babbage, Radnovich, Tomita, Hammond & Willer, 2012). Following TBI, there is a reduction in emotional empathy like a reduction in affective reactions to the emotional displays of others (Rushby,McDonald, Randall, de Sousa, Trimmer & Fisher , 2013). Major depression is one of the most frequently reported behavioural sequelae of TBI; Fatigue, distractibility, anger or irritability, and

rumination are the most common depressive symptoms in non-acute moderate-to-severe TBI patients. Patients with major depression show feeling of hopelessness, worthlessness, and anhedonia (Riggio & Wong, 2009). Depression after TBI is associated with unfavorable outcomes in many domains of societal participation. Individuals with TBI have major depression lasting more than 6 months exhibit deterioration in social functioning and performance of activities of daily living (Hart, Brenner, Clark, Bogner, Novack, Chervonena, Nakase, Richardson & Arango-Laspilla, 2011).

According to Hanks, Temkin, Machamer and Dikmen (1999), a variety of emotional sequelae and adjustment difficulties have been reported after TBI such as emotional disturbance, including anxiety, agitation, irritability, anger, paranoia, impulsivity and emotional lability, as well as passive emotional disturbance such as depression, apathy, and anergia.

3.2.5.2 Cognitive dysfunction

According to Riggio & Wong (2009), cognitive dysfunction is characterized by impairment of attention or concentration, memory, and or executive function. Patients may have difficulties performing pre-injury tasks and jobs or following instructions that would ordinarily be routine. There may be difficulties with sustaining attention, planning, switching parameters, organising, or sequencing. Yasuno, Matsuoka, Kitamura, Kiuchi, Kosaka, Okada, Tanaka, Shinkai, Taoka and Kishimoto (2013), state that patients with TBI have difficulty making advantageous decisions. They show deficits in tasks relying on focused and divided attention on verbal and on executive functions. Executive impairments are related to planning, inhibitory control, monitoring, and mental flexibility.

Following TBI, patients often demonstrate confusion as well as an inability to concentrate. They are also distracted, have difficulties performing more than one task at a time, and require increased time to perform tasks, (Bales, Wagler, Kline & Dixon, 2009). Survivors of severe traumatic brain injury (TBI) frequently have

difficulty performing more than one thing at a time (Azouvi, Couillet, Leclercq, Martin,Asloun & Rosseaux, 2004). After brain damage, subtle language disorders without aphasia may arise in persons with a frontal-lobe lesion (Dardier, Bernicot, Denaloe, Vanberten, Fayada, Chevignard, Delaye, Laurent-Vannier & Dubois, 2011).

All the above mentioned points are evident in the results of a study by Spitz, Bigler, Abildskov Maller O'Sullivan and Ponsford (2013), which included 69 individuals with mild-to-severe TBI, 41 of whom also completed neuropsychological tests of attention, working memory, processing speed, memory and executive functions. A widespread reduction in grey matter volume was associated with increasing age. Regional volumes that were affected also related to the severity of injury, whereby the most severe TBI participants displayed the most significant pathology. Poorer retention of newly learned material was associated with reduced cortical volume in frontal, parietal, and occipital brain regions. In addition, poorer working memory and executive control performance was found for individuals with lower cortical volume in temporal, parietal, and occipital regions.

3.2.5.3 Physical problems

TBI patients, with moderate to severe injury, have increased likelihood of seizures that persists for at least 30 years post injury (Bigler, 2001).In a study by Gautschi, Huser, Smoll, Maedler, Bednarz, von Hessling, Lussmann, Hildebrandt and Seule (2013), the results showed that the most common physical complaints were balance problems and headaches and seven patients were taking anti-seizure medication.

3.2.5.4 Behavioural problems

Behavioural disorders such as aggressiveness can be at the forefront of the clinical picture. Eleven to thirty-four percent of patients after TBI present agitation or aggressive behaviour (Saout, Gambart, Leguay, Ferrapie, Launay & Richard, 2011). In the behavioural domain, problems related to aggression are a major source of distress for both patients and relatives after TBI, even long after the injury, (Benedictus et. al, 2010).

Pervasive and chronic social difficulties are a long-term problem for the majority of people with severe TBI. Poor social functioning is commonly manifested in displays of socially inappropriate behaviour which include emotional lability, insensitivity, and impulsivity (McDonald, Rushby Li, de Sousa, Dimoska, James, Tate & Togher, 2011). A spectrum of emotional and behaviour problems from social disinhibition to latent responses and inertia have been reported after TBI, and were worse after severe TBI (Massagli, Jaffe, Fay, Polissar, Liao & Rivara, 1996). Executive dysfunction after TBI is linked to impulsivity, emotional dysregulation, and violent behaviour, particularly in injuries affecting the prefrontal cortex and the medial temporal regions of the brain (Cantor, Ashman, Dams-O'Connor, Dijkers, Gordon, Spielman, Tsaousides, Allen, Nguyen & Oswald, 2014).

In a study by Mandon, Deffontaines Rufin, Bayen, Bruiguiere & Pradat-Diehl (2011), a 35-year-old man had severe TBI at the age of 21, responsible for right fronto-temporal brain damages. During the acute phase, the patient exhibited behavioural and cognitive disturbances such as agitation, hetero-aggressiveness and executive dysfunction. During the chronic phase, there were socio-professional problems, difficulties in the follow-up and neuro-behavioural disturbances such as aggressiveness, impulsivity and pathological collectionism. This behaviour had major effects on familial and social life, leading to hospitalization, 15 years after the TBI.

3.2.6. Treatment and rehabilitation following TBI

According to Hammell and Henning (2009), time from injury to definitive neuropsychological care can affect outcome for patients with severe TBI. Patients with mass lesions have better outcome if they receive neurosurgical treatment within four hours of injury.

This study focuses on African people's perceptions of TBI hence the following section includes literature on the perceptions held by African people and non-Westerns on illnesses and diseases and belief systems of Africans.

3.3 African Perspective

Cultural differences in health attributions have major implications for medical professionals because attributions play an essential role in the formation of beliefs concerning health and illness (Vaughn et al., 2009). How illness and disease are explained often varies from culture to culture. Perceptions of illness are culture related (Nkosi, 2012). There is a common belief system held by people across the African continent despite differences in urbanisation, class, tribal affiliation, religion and geographical location (Eagle, 2004).

3.3.1 African's Belief Systems

In most African societies religion, is a way of moral order. It creates a sense of security and order in the community. Followers believe in the guidance of their ancestral spirits, spiritual leaders and Supreme Being.

3.3.1.1 Spiritual leader, Traditional healer and Witchdoctor

The spiritual leader is essential in the spiritual and religious survival of the community. In the Pedi culture, there are mystics or *dingaka* that are responsible for healing and 'divining' - a kind of fortune telling and counseling. Traditional healers have to be called by ancestors. They undergo strict training and learn many skills, including how to use herbs for healing and other, more mystical skills, like the finding of a hidden object without knowing where it is (South African History Online, 2011).

The fact that Africans believe that misfortune is caused by witchcraft makes them believe in the witchdoctors who are also known as dingaka. Witchdoctors heal those who are thought to have been bewitched by others. They are the chief enemy of witches. They are people who fight witchcraft, by use of magical and material medicines. Witchdoctors are often medicine-men, leeches, herbalists, soothsayers, and diviners all in one. They have useful functions, even if one accepts the point of view that witchcraft is impossible (Tembo, 1993).

3.3.1.2 Ancestor worship (*badimo*)

According to SAHO (2011), ancestral worship and belief is an extension of a belief in and respect for elders. Proponents of traditional African religion believe that ancestors maintain a spiritual connection with their living relatives. Ancestral spirits are good and kind. The negative actions taken by ancestral spirits is to cause illnesses to warn people that they have gotten onto the wrong path. To please these unhappy ancestors, usually offerings of beer and meat are made. Ancestors are part of every major event such as wedding, births and deaths as well as less important ones such as getting a job and finishing university. During these events an offering is usually made to honour, please and thank the ancestors. The Pedi practice ancestral worship (*phasa*) which involves animal sacrifice and the offering of beer. A cow, sheep or chicken is slaughtered and the ancestors are called to receive the offering and bless the gathering.

Ancestors are believed to have a central place and to play a pivotal role in African society. They are viewed as having considerable agency in the afterlife and their beneficience is crucial to the existence of their offspring and future generations. The ancestors are accorded considerable reverence and remembrance and many traditional ceremonies and practices are designed to learn their wishes, to be guided by their wisdom and to have communion with them. To be alienated from one's ancestors or to incur their displeasure is cause for considerable disquiet or anxiety (Eagle, 2004).

3.3.1.3 Supreme Being (*Modimo*)

Traditional African religion recognises a Supreme God, followers do not worship him or her directly as they do not feel worthy enough. They ask the ancestors to communicate on their behalf. The Supreme Being is called upon in times of great hardship and need, like drought or epidemic that may threaten the entire community. The Supreme Being is the connection between people and their environment (SAHO, 2011). The Pedi people describe their supreme being as *Modimo* (Muller, 2011). There are also a number of independent churches that combine elements of African traditional religion with Christianity. These churches emphasise healing and the Holy Spirit. One of the most well-known of these churches is the Zion Christian Church (ZCC), which was founded by two Pedi brothers. The ZCC has an enormous

following and attracts followers from all over South Africa. Each spring there is a "Passover" meeting at the churches' headquarters in the Limpopo Province, in Moria, which is attended by thousands of people (SAHO, 2011).

African beliefs play a major role in the attribution to illnesses and diseases. They believe that certain forces are behind their illnesses and diseases which are very different to the Western perspective as any illness and diseases are a result of a natural cause, and this is evident in the following section.

3.3.2 Factors That Influence Perceptions

Oosthuizen (n.d), mentions that South Africa is a culturally diverse nation affected by a poor economic situation, and many illiterate people and this creates a variety of stressors and unique consequences for people with TBI and their families. Africans hold the belief that bad things do not just happen. There has to be forces that contribute to the bad event such as witchcraft. Injuries and illnesses do not just happen according to the Africans. Something and someone are held responsible for the injuries and illnesses. Africans usually perceive these symptoms to be something more sinister rather than just being an injury and there are certain factors that contribute to their perceptions.

3.3.2.1 Level of knowledge and information about TBI

According to Mokhosi and Grieve (2004), there are many factors that influence the way people perceive and understand TBI

- **Level of education**

When the caregiver is well-educated the better understanding of TBI and its consequences (Mokhosi and Grieve,2004),

- **Lack of appropriate information**

Another factor that affects a lack of understanding of TBI is lack of appropriate information about TBI and its consequences. Understanding the processes associated with TBI differs according to individual contexts and cultural factors (Mokhosi & Grieve, 2004). Having information about TBI or knowing about it can

help with how one and their families deal with it. According to Swift and Wilson (2001), it is a common complaint from victims of brain injury, their caregivers, and professionals who work with brain-injured people, that there is a lack of understanding of the problems of brain injury both amongst members of the general public and also health professionals who do not have experience in this area. According to Jumisko, Lexell and Soderberg (2007), people with TBI and their close relatives experience that other people lack knowledge and understanding about how challenging living with TBI is. To the best of one's knowledge, there is lack of studies focusing on how people with TBI and their close relatives experience treatment from other people. Increased knowledge about how people with TBI and their close relatives experience treatment enables them to be treated in a way that facilitates their daily life.

3.3.3 Causal Attributions

According to Mokhosi and Grieve (2004), in many African families certain cultural belief systems play an important role in the perception of adversity. These are, among others, sorcery and witchcraft, the role of ancestors, and religious beliefs. Many African people believe that all the various ills, misfortunes, sicknesses, accidents and tragedies encountered are caused by the use of the mystical power held by a sorcerer, witch or wizard. There is a belief that nothing harmful happens by chance; everything is caused by someone directly or through the use of mystical powers. There is also a strong belief in the role that ancestors play in causing adversity**.**

According to Juma (2011), from the African perspective ill-health is manifested in physical diseases or mental illnesses, as well as a breakdown in social and spiritual mechanisms of the individual and the community. The interconnectedness of the phenomenal world and spirituality are two major aspects of traditional African worldviews that deal with ill-health, causes of ill-health and healing. Ill health from an African perspective, accrues from multiple causes that are mostly external. These external causes have humans, supernatural and ancestral spirits as agents of diseases of various kinds.

3.3.3.1 Witchcraft and sorcery (*Boloi*) as a cause

According to Nkosi (2012), another aspect associated with the cause of diseases and illness is witchcraft. Witchcraft is a spiritual practice or act by which forces of darkness are transmitted via the spiritual world. Words or names of people concerned are mentioned or curses are made in order to change ones situation for worse. Witchcraft is believed to be an act pressured by jealousy.

In a study by Al-Adawi et.al, (2012), the participants who were families of people who endured trauma to the head reported the following, one of the families reported that their family member had fallen from a tree. The family consulted a traditional healer who revealed to the family that the man had been a victim of jealousy or the evil eye. The traditional healer's diagnosis confirmed the family's suspicion that it had been a magic spell rather than an unfortunate accident that had caused the man to fall and his personality to change, while another family believed that their family member fell victim to what they call *Mu ghayeb* (zombification) in which the injured person is not their actual self but a zombie, their spirit was stolen during the accident that is the reason they are left in a vegetative state after the accident.

In a study by Mokhosi and Grieve (2004) on TBI, families' responses to questions regarding the nature of TBI and possible causative factors were categorised according to sub-themes in which witchcraft is included. Of the 22 pairs of patients and caregivers interviewed, 9 believed that the accident that led to TBI and its consequences was due to witchcraft. The reasons advanced for this belief included jealousy on the part of neighbours who wanted a couple to divorce or who wanted a child to fail academically or in a career. In agreement Apostolides and Dreyer (2008) state that, for Africans illnesses, misfortune and disturbances are almost always attributed to evil spirits that have been caused to come upon the unfortunate person or family via a witch, wizard or sorcerer.

A study by Nkosi (2012), conducted on how people understand illness, sickness and diseases showed that Africans have their own beliefs as far as causes of illnesses and diseases are concerned. Three participants commented that witchcraft is highly practics in area and much of illness and sickness is a result of witchcraft. Five participants maintained that illness is a form of punishment from supernatural spirits and supernatural being (God). This has resulted to this punishment being passed

from generation to generation. Two of these participants made an example of lung cancer disease. *"Because my grandfather died of lung cancer, my father also died of lung cancer and my older brother is also affected by the same disease. We have accepted lung cancer as a family disease even though it hard and painful for us"* and the other five responded that illness and disease is as a form of control by human spirits and demons that enters a human body and dwell there. Demons are defined as disembodied spirits that choses to enter a human being voluntarily or by human choice. These participants responded that *"one demon enters the body system of a human being and open the close doors for others and cause so many negative aspects in that person such as ill-behaviour or sickness. To get rid of them requires God Himself to take them out",* she said.

Thus, illness is believed to be caused by the intervention of a supernatural being or a human being with special powers. A supernatural being might be a deity or a dead ancestor. A human being with special powers might be a witch or a sorcerer. Evil forces cause illness in retaliation to moral and spiritual failings. If someone has violated a social norm or breached a religious taboo, he or she may invoke the wrath of a deity and their sickness is explained as a form of divine punishment. Illness is seen as punishment for failing to carry out the proper rituals of respect for a dead ancestor. Evil spirits possess the living to revenge the dead. Illness in many cultures is accepted as simply bad karma or bad luck (Carteret, 2011).

3.3.3.2 Disobedience towards ancestors

According to Nkosi (2012), Africans still maintain the practice of ancestry as a common and popular religion or belief. If there is communication breakdown or disobedience, the belief is that the ancestor possesses the ultimate power to punish those who commit such. When disrespected the ancestor creates a friction or state of punishment in the form of illness, bad luck and other kind of misfortunes and even death.

3.3.4 Treatment of illnesses In the African Culture

The treatment and rehabilitation of illnesses and injuries in the African culture connects with their beliefs in the causation of the illness and injuries. According to

Truter (2007), African traditional healing is intertwined with cultural and religious beliefs, and is holistic in nature. It does not focus only on the physical condition, but also on the psychological, spiritual and social aspects of individuals, families and communities. In South Africa, most people associate traditional medicine with the herbs, remedies (*dihlare or muti*) and advice imparted by *dingaka* or *sangomas*, and with strong spiritual components. According to Asonibere and Esere (1999), The use of traditional medicine in many Black ethnic groups of South Africa is essentially similar, because a disease is viewed as a supernatural phenomenon governed by a hierarchy of vital powers beginning with the most powerful deity followed by lesser spiritual entities, ancestral spirits, living persons, animals, plants and other objects. Traditional medicine, has at its base, a deep belief in the interactions between the spiritual and physical well-being.

Traditional healers use a holistic approach in dealing with health and illness. The healer deals with the complete person, and provides treatment for physical, psychological, spiritual and social symptoms. The traditional healing process follows different stages:(1)identification of the cause or discovery of violation of established order through supernatural divination and (2)removal of the hostile source by neutralisation of the sorcerer or seeking of the ancestors' forgiveness with sacrifices and rituals to appease their anger or by prescription of certain medication (Truter,2007)

3.4. Impact of TBI on families

3.4.1. Stressful on relationships

TBI is reported to be strainous to family relationships and that it increases the caregivers stress in a study by Scharlach, Li and Dalvi (2006), in which the results showed who caregivers that are highly educated will have more strain from caring for family members with mental impairment as they have jobs that are more psychologically stressful. Interpersonal and interactional disruptions associated with family members cognitive impairment may be particularly distressing for more highly

educated caregivers. Spouses reported greater caregiver strain whereas daughters and sons experienced greater family conflict.

3.4.2 Financial problems

In a study by Oosthuizen (n.d), TBI is an economic burden because the results were as follows: having enough resources for oneself and one's family was one of the needs given high importance, while having enough resources for oneself and one's family and having enough resources for the injured child, both fell under the needs most frequently unmet category.

3.5. Stigma

Shame and embarrassment seem to be associated with TBI as results of a study that investigated the impact of TBI on UK and Japanese family members living with patients showed that of the two groups investigated, a great number of the Japanese families were worried about the opinions of relatives and people who were not part of their family. The families were worried about the views of the relatives about the change in the survivors' behaviour (Watanabe, Shiel, McLellan, Kurihara & Hayashi, 2001).

Shame seemed to be a powerful cultural dynamic, as a number of respondents and family members recounted lying to friends and family members about the injury, concealing vital facts from family members and rehabilitation providers, or withdrawing themselves from their normal social networks to try and minimise the impact of the shame. One source explained that the shame came from the perceived association of brain damage with madness. An Arabic bilingual interviewer observed that a respondent was not comfortable with the term brain injury when used in Arabic, and hypothesised that anything wrong with the brain in Arabic may be understood as a sort of madness and that is shameful (Simpson et.al, 2000).

3.6. Conclusion

The chapter highlighted the definition of TBI, its mechanisms, causes and sequelae. It gave a clear understanding of what TBI is, from a medical viewpoint as well as from the African spirituality and tradition perspectives.

CHAPTER 4

METHODOLOGY

4.1. Introduction

The present study was designed to investigate the perception of TBI among African families, using the Afrocentric method. The study involved finding out and understanding the views of people regarding TBI. In other words, interest was in revealing the different views of African people who are affected by TBI. The Afrocentric method was helpful in explaining the perceptions of Africans.

Afrocentric methodologies are intended to investigate pertinent research questions legitimately and effectively especially those that possess embedded assumptions about race and culture (Reviere, 2001). Using an Afrocentric methodology has equiped the researcher with a detailed foundation for employing culturally correct methods, principles and frameworks in analysing African phenomenon (Pellerin, 2012). Afrocentricity, as a method, serves as an empirical method rooted in the active agency of African people. Afrocentric methodologies help equip researchers with tools to develop valid research objectives and questions that attempt to improve the social conditions that African people face like helping African people to return to their social reality that is more like their own cultural center (Pellerin, 2012).

Pellerin (2012) further explains that in an Afrocentric research project, the researcher is supposed to be grounded in the culture and history of the African community in which the researcher seeks an in-depth understanding.

People who were interviewed were TBI victims and their caregivers. Interviewing these people helped tap into the minds of Africans and get their views on TBI. It helped find out how Africans perceive TBI.

4.2. Research Design

The study design was based on a qualitative perspective to explore the perceptions of TBI in African families. The researcher used the Afrocentric methodology to investigate African phenomenon for the purpose of developing a culturally accurate understanding of African reality.

4.3. Sampling, population and sample size

Purposive sampling was used to identify the participants. According to Adler and Clark (2011), in purposive sampling, the researcher selects elements based on his or

her judgment of what elements will facilitate an investigation. Participants were people who had sustained severe TBI, residing in the villages within the Capricorn District of the Limpopo Province. The first group included five participants who had sustained severe TBI as diagnosed by a medical practitioner. The second group of participants comprised of one or two members from the victim's families who were responsible for the caregiving and support. The researcher interviewed five TBI victims and nine family members in total. A total of fourteen participants(n=14) were used for the study.

4.3.1 Entry negotiation and Incusion and Exclusion criteria

The researcher identified these participants by obtaining permission from the Limpopo Provincal Department of Health to visit Neurology outpatient clinics to identify TBI patients who have appointments with neurologists for check-ups. These participants were accompanied by their caregiver and agreed to be part of the study. For the selection of these participants the inclusion criteria were: an onset of TBI which had occurred at least 2 years ago and they are residing in a rural village of the Capricorn District. With regard to the caregivers that comprised participants for the study, they are people that took care of TBI victims from the onset of the injury and knew them prior to their injury.

4.4. Data collection

Data was collected by means of semi-structured interviews (see Appendix A for an interview guide-English version and Appendix B, for Interview guide- Sepedi version) that guided the research questions that the interviewer addressed. The families and TBI victims were interviewed one at a time for a period of 45 minutes each. Notes were taken as the participants were answering to the questions posed by the interviewer and a tape recorder was used to capture all the deatails that could have been missed when taking notes. The interviews were also recorded to capture both the interviewers' words and other non-verbal cues. The initial interview was complimented by follow-up interviews that sought clarification and elaboration of

ideas expressed in the original interviews. The interviews were conducted in English and Sepedi depending on the participants' language preference.

4.5. Data analysis

Since the present study was located in the Afrocentric research, the following steps as outlined by Asante (1998) were observed and adhered to when analyzing the data:

(a) The psychological time and space in which participants are located shall be analysed.
(b) The researcher reflected and determined where she stands in relation to the interview process to avoid confusing the results by protecting her views
(c) The researcher analysed the etymiological uses of words and terms used by subjects in order to determine the location of subjects.
(d) The researcher analysed the myths and beliefs behind the subjects' responses to establish what influences them.
(e) The researcher has made an effort to establish the economic, political and cultural aspects that influenced the attitude and language of participants in relation to perception of TBI in African families.

With regard to the specific data analysis method, the researcher used thematic content analysis of narratives of the participants. According to Braun and Clark (2006), thematic content analysis entails identifying, analysing and reporting themes within data. The following steps of thematic content analysis as elucidated by Braun and Clark (2006) were followed in the present study.

Step 1: Becoming familiar with data

Becoming familiar with data entails actively reading the data with a view to extracting meaning and patterns. In this study, this involved carefully reading the data to extract participants' understanding of their perceptions TBI from an African perspective.

Step 2: Generating initials codes

Generating initials codes involves generating initial ideas regarding what is in the data that may be of interest. It also involves the creation of new codes for the data. In the present study, this involved generating possible codes for the perceptions of TBI from an African perspective.

Step 3: Searching for themes

Searching for themes involves sorting the different codes into potential themes and collating all the relevant coded data extracts within the identified themes. It involves considering how different codes may combine to form overacting themes. In the current study, this entailed collating all relevant data that relates to perceptions of TBI form an Afrocentric perspective.

Step 4: Reviewing themes

Reviewing themes involves the refinement of identified potential themes. Data, within themes, should have related meanings but there should be clear distinctions within themes. In the current study, themes that relate to the perception of TBI form an African perspective was identified.

Step 5: Defining and naming themes

Defining and naming themes defines and further refines the themes that are presented for analysis, and then analyse the data within the themes. Definitions and names should capture the essence of the relevant themes. In the current study, themes that related to perceptions of TBI from an African perspective was reviewed.

Step 6: Producing the report

Producing the report begins when the researcher has worked out the themes. This involves the final write-up of a report that demonstrates relationships within and between various themes. In the current study, this will entail a final write-up of a report on the perceptions of TBI from an African perspective based on the available data.

4.6 Reliability and validity

Patton (2002) states that validity and reliability are two factors which any qualitative researcher should be concerned about while designing a study, analysing results and judging the quality of the study. Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are, (Joppe, 2000). Eisner and Peshkin (Klenke, 2008) mentioned that vailidity in qualitative research involves determining the degree to which researchers claim about knowledge corresponding to the reality (or research participants' constructions of reality).

4.6.1 Credibility

Credibility is the alternative to internal validity, in which the goal is to demonstrate that the inquiry was conducted in such a manner as to ensure that the subject was accurately identified and described (De Vos, Strydom, Fouche, & Delport, 2005). In qualitative research, credibility is maintained by an inquiry that ensures that the subject is accurately identified and described (De Vos et.al, 2005). The researcher in the current study asked a series of questions and looked for the answers in the research of others. In this study, the participants perceptions of TBI was not distorted or made up. Given that the protocols were recorded in Sepedi and later translated to English, the challenges of translation, for example, omitting some of the expressions of the participants could be considered a threat to this study but the researcher used translators to preserve the original statements of the participants

4.6.2 Conformability

Confirmability captures the traditional concept of the objectivity. Lincoln and Guba stress the need to ask whether or not the findings of the study could be confirmed by another (De Vos et.al, 2005). Lincoln and Guba (in Marshall and Rossman, 1999) emphasize the need to ask whether or not the findings of the study could be confirmed by another. In the current study, the researcher went over the notes and recordings many times to make sure the statements written down were the same as those of the participants.

4.6.3 Biasness

To avoid and minimise biasness, the researcher applied the following:

(a) When transcribing the recordings, the researcher did so faithfully.

(b)The researcher followed the data analysis steps when going through the transcribed interviews.

(c)The researcher followed the ethical standards of research during interviews and when interpreting data**.**

4.7. Ethical considerations

4.7.1. Permission for the study

Prior to the commencement of data collection, the researcher obtained permission from the ethics committee of the University of Limpopo (see Appendix I), the Department of Health Limpopo (see Appendix F) and the Provincial hospital (see Appendix H).

4.7.2. Anonymity

Participants' names were not mentioned and kept although the names were kept anonymous. The names of the participants were substituted with numbers.Thus anonymity is guaranteed (see Appendix C (English version) and Appendix D (Sepedi version).

4.7.3. Confidentiality

Participants' information is kept confidential. There will be no disclosure of information given by the participants during the interview see Appendix C (English version) and Appendix D (Sepedi version) .

4.7.4. Respect for persons

The researcher ensured that the dignity of the participants was respected and this was done by assuring the participants that they are just not people partaking in a study but people who bring valuable information that will be helpful(see Appendix C (English version) and Appendix D (Sepedi version).

4.7.5. Informed consent

Participants were given all the information with regards to the research. A consent form was handed to the participants who stated the overall purpose and any risks or benefits of participating. Participants were informed that participation was voluntary and that they could withdraw at any time they wished to do so. The form also stated that there was no fee for their participation (see Appendix C (English version) and Appendix D (Sepedi version).

4.7.6. After care

Should participation in the research cause any emotional stress, they would have be referred to the local hospital for psychological support by psychologists but none whatsoever happened.

CHAPTER 5

RESULTS

5.1. Introduction

This chapter discusses the findings of the study: First, the demographic profile of participants, Second, the explanations from the participants. This chapter further presents the following themes that emerged: a). Participant's knowledge of TBI, b).

Participants' perceptions on consequences of TBI, and c). Participant's perceptions of the causes of TBI. It ends with the summary of the results .

5.2. Profile of participants

Participants comprised of two groups. Group 1 consisted of the TBI victims and group 2 made up of the TBI victims family members who were responsible for caregiving. The TB victims' group comprised of five participants whose ages ranged from 29 to 60 and were all males. Group 2 comprised of the victims' family members responsible for caregiving and included the victims' close family members such as wives/ partners, mothers, siblings and children. All participants were drawn from Capricorn District of the Limpopo Province.

The following table gives description of the participants;

TABLE 1: Showing the residential area and duration of TBI

PARTICIPANT NO	PARTICIPANTS	RESIDENTIAL AREA	DURATION SINCE TBI
1	TBI VICTIM 1	Ga-chuene	4 YEARS
2	TBI VICTIM 1'S SISTER 1	Ga-chuene	
3	TBI VICTIM 1'S SISTER 2	Ga-chuene	
4	TBI VICTIM 2	Moletji(Ga-Semenya)	3 AND A HALF YEARS
5	TBI VICTIM 2' BROTHER	Moletji(Ga-Semenya)	
6	TBI VICTIM 2'S MOTHER	Moletji(Ga-Semenya)	
7	TBI VICTIM 3	Ga-Molepo	4 YEARS
8	TBI VICTIM 3'S SON	Ga-Molepo	
9	TBI VICTIM 3'S WIFE	Ga-Molepo	
10	TBI VICTIM 4	Ga-Maja (moshate)	3 YEARS, 2 MONTHS
11	TBI VICTIM 4'S MOTHER	Ga-Maja (moshate)	
12	TBI VICTIM 4'S PARTNER	Ga-Maja (moshate)	

13	**TBI VICTIM 5**	**Chebeng**	4 YEARS
14	**TBI VICTIM'S WIFE**	**Chebeng**	

5.3. Phenomenological descriptions by the participants

5. 3.1. Participant's knowledge of TBI

5.3.1.1 Family members' knowledge of TBI

Findings from the study indicate that the victims' family members did not know much about TBI and some have never heard of TBI prior to their family members' accidents and hospitalisation.

Participants quoted did not know of TBI. Some participants had heard of TBI but appeared to not know much about it. This is highlighted in the following quotations:

> *"I have heard of the term traumatic brain injury prior to his accident but I didn't know about it".* ***[Participant 2]***

Some participants mentioned that they did not know of TBI because it is not part of the African reality and one even mentioned that they did not know of it because they were not educated. The following statements from the participants support the above mentioned statement:

> ***"****No, I have never heard of TBI prior to the accident. Those are just white people's terms and we cannot know of them. Ask me about African stuff, I know a lot and I might even be able to explain how some things come about. The reason why most of us do not get healed is because we focus on white people's diseases and their terms".* ***[Participant 5]***

> *"I am not educated that's why I don't know these modern things. TBI must be a modern term or a western term because I have never come across such".* ***[Participant 6]***

However, some participants did not know of TBI at all. The following quotations confirms the the latter statement:

> *"I didn't know of TBI".* ***[Participant 9]***

"I knew nothing about TBI". ***[Participant 3]***

"I've never heard of it and I still don't get it. The way the doctors explain it, is almost impossible to believe. A mere accident will cause TBI and the TBI changes a person's whole being? ". ***[Participant 8]***

"No, I didn't know anything about TBI". ***[Participant 11]***

"I did know of brain injury but I did not think it was this serious. I knew that one could get an injury to the head but I didn't know of the term and the consequences. If this is TBI then it is a serious thing". ***[Participant 12]***

"I didn't know what it was and I still don't know what it is. I heard of it when my husband was hospitalised. The doctors mentioned it and I was surprised. They could see that I was surprised and my endless questions were a give-away". ***[Participant 14]***

5.3.1.2. TBI victims' knowledge of TBI

TBI victims showed that they had no knowledge of TBI prior to their hospitalisation. All TBI victims share the level of knowledge with regard to TBI. All the TBI victims who were interviewed knew nothing about TBI prior to their hospitalisation. This is explained in the following quotations;

"I have never heard of TBI before I was involved in the accident. I started hearing of the term when I was in hospital" ***[Participant 1]***

'"I didn't know anything about TBI. I knew about TBI after I was involved in a car accident. ***[Participant 2]***

"I did know that it was possible for one to get head injury but not for it to affect the brain and be in this state". ***[Participant 7]***

" I didn't know about TBI. The first time I heard of it was when I was in hospital, days after waking up from a coma and I heard doctors talking to my family about it. It is only after I had fully recovered that I got to understand it". ***[Participant 10]***

*"I have never heard of TBI before and I knew nothing about it".**[Participant 13]***

5.3.2. Participants' perceptions on consequences of TBI

5.3.2.1. Family members' perceptions of the consequences of TBI

TBI has been recorded to bring about both physical and mental problems. The problems may include memory loss, amongst many things, but participants of this study, have proved to have their own set of views about the problems TBI victims face. The participants' perception of the consequences of TBI is culturally defined but one thing that is common within most of the families is the burden and the difficulty of caring for a TBI victim. Most of the TBI victims cannot do things on their own because of the severity of their damage;

The findings of the study reveal that most of the TBI victims cannot do much for themselves. The following quotations corroborates with the above mentioned;

"……*he is a vegetable*". ***[Participant 2]***

*"He is part of the furniture". **[Participant 3]***

*"We do everything for him". **[Participant 12]***

Some of the participants indicated a change in their loved one's cognition although they believe that it is not due to damage of the brain. The following quotations give the participants change in cognition:

*"My brother has changed a lot. ……he takes times to understand things. On some things are worse but on some things are better. We become hopeful that he will fully recover but he forgets a lot and does not remember a lot of things but with each passing day, he is getting better". **[Participant 3]***

Other participants have also mentioned behavioural changes in their loved ones as it is known that damage to the brain does not only bring changes in the physical and mental state of a person but also in a person behaviour and emotional state:

"….*he is depressed".* ***[Participant 9]***

The condition of the TBI victim does not only have a negative impact on the emotional state of the care givers but it also has an effect on the financial state of the families because most of the victims were breadwinners in the families and because of their current mental and physical state they were unable to get jobs or return to the lives they lived prior to their accidents. The following explanations from the participants reveal the impact the condition of the TBI victims has on their lives:

"*My father was not a lazy person. We were born into a well-off family…..he is now paralysed and there won't be any money coming in*". ***[Participant 8]***

The participants also mentioned a change in the relationship between them and their loved ones since the accident and they stated that it has taken a toll on their interaction. The following quotations support the above assertion:

"My brother was our friend and father. We spoke to him about everything and he was always there to protect and support us both financially and emotionally. But all that has since changed because we hardly spend time together, he spends most of his time sleeping. If we talk about old times, it might bring back memories and we are afraid it might hurt him. We have become more of his helpers than little sisters. Our relationship has changed a lot". ***[Participant 2]***

"I miss how he would take me out shopping and spoil me rotten. My brother was like a father to us but now that has changed. We hardly laugh or talk about stuff. We never fool around because he is forever tired. We cannot go out because since he's on a wheelchair, he lost interest in a lot of things. I understand him but I feel like I have lost a best friend since h got injured. ***[Participant 3]***

"*My brother was my buddy, my partner in crime. My drinking partner but now I'm all alone. I am now more of his helper than his buddy. The accidents and witches of this community have taken my buddy away from me. Even when we do spend time together, I don't know what to say and what not to say to him".* ***[Participant 5]***

"We used to go out a lot, as a couple. We would have weekend-aways twice in a month. Some Fridays we would go clubbing but that has since changed. We hardly even kiss. I don't even remember the last time he told me he loved me" ***[Participant 12]***

"My father was my hero, he was a strong man. I used to admire his strength as an old man. I can't even spend five minutes with him without feeling sorry for him. I am now his helper and he has become like a baby. Our relationship has become that of helper and baby". ***[Participant 8]***

The following statements prove that even though family members were made aware of the changes that came with TBI, the beliefs the participants held disagreed with the medical side of things. They did not believe the state of their family members' is a result of TBI.

"*The doctors explained it to me but I do not believe it. I don't take it because I know what and who put him in this position".****[Participant 2]***

"ahhhh these people always have an explanations for things but they do not know the truth and reality of things." ***[Participant 3]***

"There is no such, this is all witchcraft. Do you know how smart witches are? They have ways of hiding their doings by making it seem like an illness". ***[Participant 5]***

*"What I know is that, when you are bewitched. You are bound to have changes both mentally and physically. It was the aim of the witches".****[Participant 8]***

"*The same with witchcraft, they will make you blind, unable to talk or walk, that is how powerful witchcraft is".****[Participant 11]***

5.3.2.2 TBI victim's perceptions of consequences of TBI

TBI victims also mentioned complications such as cognition and memory loss as well as physical changes, they went through following TBI. The following quotations bear testimony to the above-mentioned statement:

"I cannot speak properly. I am forgetful most of the times but my two little sisters help me a lot". ***[Participant 1]***

*“I experienced physical and mental complications. I would swear at people and lash out at the. I could not stand people after I was released from hospital. I can’t tell you what was happening to me but i was like a mad person. I acted mad until my family was told by the doctors that my behaviour stemmed for the head injury because my brain was affected I acted that way. I have good and bad days”.**[Participant 4]***

“After that I was discharged but I could not do anything for myself. I was like a baby, things were done for me. I was fed, bathed and would be accompanied to the toilet and It is still like that. I couldn’t do anything for myself and my speech was gone. When people were talking to me, I would want to answer but nothing would come out. I struggled to get back to normal. I still struggle with remembering things and I can’t walk that means I can’t work. I experience physical pains and a terrible headache every now and then”. ***[Participant 7]***

*“I wasn’t okay for a very long time. I can’t walk, I have to be carried from point A to B. I have a three year old son. I cannot play with him. I cannot go work for him”. **[Participant 10]***

“**I am disabled, I cannot do stuff for myself”. **[Participant 13]

TBI victims’ understanding of the consequences of TBI seems to be widely influenced by their knowledge of TBI.

“Medically it might be termed TBI and believed to have certain effects but I don’t believe this is TBI. TBI did not cause my accident and it surely cannot be the cause of my disability”. ***[Participant 1]***

One of the TBI victims seemed to have accepted that it was TBI that caused the physical state he was in. The following quotation supports what the researcher has mentioned;

"One of the doctors explained what caused my disability and mentioned that is was TBI, although I did not know about TBI but he took his time to explain what it was and what has happened to my body". ***[Participant 13]***

One of the TBI victims mentioned how he could not work because of his disability but still does not believe TBI is the cause of his disability and his statement is as follows;

"I have a three year old son. I cannot play with him. I cannot go work for him because I cannot walk and my other hand is not working properly. If this is TBI, I respect it but I do not believe TBI can leave you crippled". ***[Participant 10]***

Based on the above extracts, it could be suggested that the victims and their family members did not believe that the conditions following their accidents were as a result of TBI. They seemed to believe that something else is the cause of their conditions.

5.3.3. Participants' perceptions of the causes of TBI

Findings from the study suggest that people have their own perceptions about the events or factors that lead to TBI. These perceptions appear to be culturally motivated, and they include witchcraft, angry ancestors and some believe it was God's plan.

5.3.3.1. Family members' perceptions of the causes of TBI

5.3.3.1.1. Witchcraft (*boloi*)

Findings revealed that witchcraft was one of the main causes of people getting accidents but there are reasons that people are bewitched for, like revenge and jealousy. Participants had different perceptions of the causes of TBI and they believe

that some people resort to witchcraft when they want to get back at someone. The following quotations prove that they believe that revenge was the reason for being bewitched

> "*My brother had a very good mind for business and he was very successful in all his business ventures. With money came different women. We used to warn him against his player ways. He changed women almost every day….. Weeks prior to his accident, two women fought for him and when he dumped one of them, she told him he has messed with the wrong girl. After the accident, she called me and asked me to tell my brother that he got what he deserved and that she was not one the foolish girls he had played. I believe she bewitched him for revenge".* ***[Participant 2]***
>
> ***"****I believe he was bewitched. It might be his business rivals but I think it's some girl he dated. She did warn him and now look at him. My sister got a call from her saying she is glad that he got injured and that she taught him a lesson".* ***[Participant 3]***
>
> *"My little brother might have endured trauma to the head but that was not the cause of his current state. Doctors told us its brain injury but it is witchcraft because he got into an argument with some old man and the old man told my brother that he was going to deal with him and he was going to "feel" it for the rest of his life. He was going to regret "stepping on his toes" and a day after he was involved in an accident, but he survived although his mental state is bad. He is sometimes mad and it's because of that man."* ***[Participant 5]***
>
> *"My son was an obedient boy but I believe what happened that day was because of a witch. The doctor's claim is brain injury because they do not understand that witchcraft is there. It is the cause of the accident and when he did not die during the accident, they made him a crazy person. You cannot get injured during a car accident and go mad, that is highly impossible. The ones that have bewitched know what they have done to him, I believe they possess his soul. He is different to the person he was prior to the accident".* ***[Participant 6]***

Jealousy appeared to be one of the reasons why people are bewitched. The families believe that their loved ones are bewitched because of their achievements and the witches believe that by bewitching the people, it eliminates their competition.

> *"My husband of 35 years has been a very hard-working person and people were jealous of his achievements I believe this is witchcraft. Men his age are struggling to make ends meet and he has a lot of cattle. We made a lot of money from the cattle. Two of our sons bought him a tractor and he made even more money. The jealousy must have multiplied and they bewitched him".* ***[Participant 9]***
>
> *"I am not one to talk about witchcraft but I believe this was caused by witchcraft. People would talk about our family due to jealousy and witchcraft was their way of eliminating the rich family. He is now paralyzed and there won't be any money coming in. I believe they bewitched him, took his soul and they are using him to run their businesses. There is a man who has not on good terms with my father, as I am speaking he has started doing business and he is doing what my father used to do".* ***[Participant 8]***
>
> *"My son graduated from a university in Johannesburg. They bewitched him because straight after he got a job, he bought a car and because of jealousy he got involved in a car accident. People never want to see other people's children success, instead of encouraging their own to work hard and succeed. They find pleasure in seeing others fail".* ***[Participant 11]***

5.3.3.1.2. Punishment from the ancestors

Ancestors play a very important role in the lives of Africans. Africans believe that when their loved ones pass over, they become spiritual beings. It is believed that they protect their loved ones and they have to be thanked from time to time. Africans thank or appease their ancestors when angry by conducting a ceremony where traditional beer is made, chickens or goats are slaughtered as offerings in their honour.

The following quotations explain how disrespecting ancestors can lead to punishment. Participants believe that their family members were punished because

they disrespected the ancestors. They believe that the accidents were signs of anger from the ancestors.

> *"My husband has been paralyzed for over 3 years now…. He must have angered the ancestors because before he had the accident, I had a little ceremony to thank our ancestors but because he was a heavy drinker, he came in and disrupted the rituals. ……Ancestors are very important in our lives as Africans. So what he did that day must have angered them and they warned him by paralyzing him. Ancestors are not to be disrespected". **[Participant 14]***

5.3.3.2. TBI victims' perceptions of the causes of TBI

5.3.3.2.1. Witchcraft

Three of the TBI victims interviewed held the same beliefs as their family members who believed that they were bewitched. They were quoted as follows;

> *"People are dangerous. Family members, relatives, neighbours, colleagues, nobody is ever happy when one succeeds. I believe I am in this state because people were jealous. Everything happened so fast for me. I was blessed with a good paying job, I bought a car and people saw that my mother's life will get improve and it did not sit well with them, they did what they did and I believe they succeeded. ". **[Participant 10]***

> *"Women are dangerous. They will bewitch you because you couldn't love them the way they wanted you to love them. I had a lot of women but there was a particular one who told me straight up that she would deal with me and this was because I told her I couldn't be with her. I was more certain she had something to do with my accident when one of my sisters told me she got a call from her, saying I got what I deserved, she was not one to be played with". **[Participant 1]***

> *"I believe it is witchcraft but doctors have their own explanations to these things. When they did not succeed with the accident, they made me crazy.*

Sometimes it takes three people to help calm me down. I can't explain what will be happening but I believe it would be the works of the witches who put me in this condition. I thank the doctors for helping me but I am now shielded by muti". ***[Participant 4]***

5.3.3.2.2. Punishment from the ancestors

In the African culture, it is believed that when one gets blessed in the form of a job or they buy a house or car or even when a child is born into the family, the ancestors have to be thanked as they played a part in the person getting blessings. When they do not get thanked or acknowledged, they get angry and the misfortune happens because they are not protecting you. The following participant was in agreement with the wife who mentioned that it was because her husband disrespected the ancestors. The husband however, supports the above mentioned about not acknowledging the ancestors in the following quotation:

"I did not want to hear of the word "badimo" (ancestors) and "go phasa" (ancestral ceremony). I was living life according to my own rules. I think my fore-fathers, grand-fathers and grand-mothers were angry at me, which is why I had that accident. I also remember coming in drunken one day and some of the relatives were here for an ancestral ceremony and I ruined everything. After recovering from the accident I started believing that maybe the ancestors were angry with me for not acknowledging them and for disrespecting them". ***[Participant 13]***

5.3.3.2.3. God's will

The following participant explains how it was God's doing and believes that God has put their family member in that position. They believed that it was God's plan for the accident to happen and for their family member to be injured in the accident. One of the TBI victims interviewed, also mentioned God as the reason behind the accident happening and his current state which is very contradictory to the beliefs of his son and wife who mentioned jealousy and witchcraft as the causes. His statement is as follows;

"What happened on that day was God's plan. Even my current state is because of his will. Everything that happens is because of Him. I believe this was God's plan. We have no control over the things that happen or that are going to happen. The accident was not anybody's fault but God had his own plans, she is alive. It would have been hurtful and depressing for my family had I died but then again it would be God's plan. God knows everything and His will has been done". ***[Participant 7]***

5.4. Summary of the results

The sample composed of fourteen participants who reside in the Capricorn District of the Limpopo Province. All the participants were drawn from areas that fall within the Capricorn District. Findings of this study revealed that participants have different perceptions regarding the knowledge and causes of TBI. A summarised version of the emerging themes is presented in Table 1. The study found that there are various factors contributing to people getting involved in motor–vehicle accidents (MVAs) such as: Witchcraft, punishment from ancestors and God's will. The participant's knowledge of TBI and its causes proves to be culturally-influenced.

Table 2: Indicating emerging themes

Main themes	**Subthemes**	**Brief description**

Theme 1: Participants' knowledge of TBI	Knowledge of TBI emerged as a theme which highlighted participant's knowledge of TBI.
Families members' knowledge of TBI	Knowledge of TBI amongst the family members was minimal.
TBI victims' knowledge of TBI	TBI victims knew nothing about TBI prior to their hospitalisation.
Theme 2: Participants' perceptions consequences of TBI	The views of the participants about consequences of TBI emerged as a theme. This theme related to how the victims have been since the accidents and how they view the physical and mental changes.
Family members' perceptions of the consequences of TBI	Participant's mentioned the changes they see in their loved ones since the changes include a change in cognition, physical ability and a change in their relationship. However, they believed this was due to other forces not TBI as doctors claim.
TBI victims' perceptions of the consequences of TBI	Victims expressed how they changed since the accident. They do not believe their injuries are due to TBI.
Theme 3: Participants' perceptions of the causes of of TBI	Causes of TBI emerged as a theme and it explains the participant's causal attributions of TBI.

Family members' perceptions of the causes of TBI	3.1 Witchcraft	It is believed that people are bewitched out of jealousy and revenge. The participants expressed that their loved ones' achievements made them targets.
	3.2 Punishment from the ancestors	As a result of disrespecting ancestors, the participants mentioned that their loved one was punished. The accident was caused by angry ancestors.
TBI victims' perceptions of the causes of TBI	3.3 Witchcraft	Three of the TBI victims believed they were bewitched. They mentioned that TBI was not the cause of their accident and injuries, it was witchcraft.
	3.4 Punishment from the ancestors	The TBI victim expressed how ancestors have the power to bring misfortune and that he disrespected them and he was punished.
	3.5 God's will	One of the TBI victims believed it was God who caused his accident and injuries

CHAPTER 6

DISCUSSION AND SUMMARY

6.1. Introduction

This chapter presents and discusses the findings of the study in relation to the literature review and other related information. It also reviews the contribution of the study in terms of the aims set out in chapter 1. These findings are discussed according to the emerging themes identified in the previous chapter. The findings are also be discussed in terms of their implications from an Afrocentric perspective.

6.2 Emerging themes

6.2.1 The knowledge of TBI

The findings revealed that participants lacked knowledge about TBI. The study proved that although some people might have heard of the term TBI, they did not know much about it. It is evident that even though some had little knowledge, cultural beliefs were the main influence of their perceptions. Culture proved to be influential in the perceptions and thinking of Africans. Some did not know anything about TBI whole some knew about it but did not know about its effects on the lives of the victims. TBI victims also did not know anything about TBI. Some mentioned that they did not know about it prior to their hospitalisation.

This is supported by Levin (2004) who asserts that in rural areas, children with TBI are often kept at home, or if they can return to school, go to their former schools where the teachers have little or no knowledge of TBI and related problems. Although the study did not touch on the areas of socio-economic status and level of education, some did reveal that even the ones that had an educational background still had their own attributions to the cause of the accidents that led to TBI. In a study by Pretorius and Broodryk (2013), the findings of the study suggested that despite the high prevalence of TBIs in SA, university students did not seem to be informed about or to understand the physical, behavioural, cognitive and psychosocial consequences of TBIs or the range of services needed by individuals who suffer from them. According to Jumisko, Lexell and Soderberg (2007) mentioned that people with TBI and their close relatives lack knowledge and understanding of how challenging living with TBI is.

A study by Chapman and Hudson (2010) also show how some people have misconceptions about TBI, patients who were unaware that brain injury commonly produces memory deficits; or believe that complete recovery from a severe head injury is possible as long as the individual works hard at recovery, may have unrealistic expectations of a full recovery. They may, therefore, experience lower self-esteem, increased levels of anxiety, depression and frustration if their perceived expectations of recovery are not achieved. Acquaintances who share similar misconceptions may view lapses in memory less sympathetically and feel frustrated too, believing that the patient could put more effort into recovering.

6.2.2 Consequences of TBI

When one suffers from TBI, it means that a part of the brain is affected. Any damage to a part of the brain means a loss of physical or mental function. Some people are even unfortunate to lose both physical and mental abilities as a result of TBI. TBI leaves victims with some sort of problems following motor vehicle accidents (MVAs). Some have lost their ability to talk, walk and think. This is an indication that any damage to a part of the brain can result in some form of disability. The current study shows that some people did not know about TBI and they found it hard to believe that there are changes with TBI. One of the participants said it was not possible to be “mad” because of TBI. Some participants were also in denial because of their family members’ behavioural states claiming it was due to witchcraft.

The physical changes were mentioned and also the fact that since the injury some of the victims were in vegetative states and they could not do anything for themselves. Changes in cognition were also mentioned which included taking time to understand things and problems with remembering things. Behavioural changes mentioned included depression, aggression and madness. Another factor is the impact TBI has on the caregivers. The caregivers mentioned that it causes stress on their side because of the work that goes into caring for the victims. TBI also has an impact on the financial state of the families because some of the victims were breadwinners and now that they are injured, they cannot work and provide for their families. Findings revealed that there are changes in the cognition, behavioural and physical

states of the TBI victims and this is supported by Kolb and Wishaw (2009) who stated that TBI patients usually manifest at least one of the following symptoms: loss of memory for events; before or after the event, alteration in mental state or loss of consciousness, brain-related physical symptoms and post-traumatic cognitive deficits.

6.2.3 Causes of TBI

TBI is damage to the brain which can be caused by a number of things like bumping your head into something when falling or in a motor vehicle accident. It is then that the brain will be damaged. Kolb and Wishaw (2009) postulated that head injuries cause direct damage to the brain by disturbing blood supply; inducing bleeding, leading to increased intracranial pressure; opening the brain infection and by producing the scarring of brain tissue. Brain injury is a common result of automobile and industrial accidents; falls during sorts, or accidental falling. However, the findings of the study prove that people hold different perceptions of the causes of TBI. The responses have shown that witchcraft, punishment from the ancestors and God's will are the causes of TBI.

According to Kanu (2014), the African concept of causality, which arrogates causes to unquestionable spiritual forces, affects the level of development in Africa. When sicknesses, like stroke, diabetes are not understood as human sicknesses, which could be dealt with in the hospital, many Africans run from one prayer house to another, or from one native doctor to another, and the end result is that many die as a result of a sickness which could have been easily cured through modern drugs in the hospital. According to Asonibare and Esere (1999), Africans attribute nearly all forms of illnesses and diseases, and personal and communal catastrophes, accidents and deaths to the magical machinations of their enemies and to the interventions of gods and ghosts.

6.2.3.1. Witchcraft

Witchcraft was identified as a cause of TBI. The responses reflect that the victims were involved in motor vehicle accidents (MVAs) because of witchcraft. The study

reveals how people are bewitched out of revenge and jealousy. Participants claim that the success of the TBI victims made them susceptible to being bewitched out of jealousy. Jealousy makes people bewitch others as a way of eliminating them and the participants believe that because they could not succeed by killing the TBI victims in the accidents, the physical and mental manifestations if TBI was the witches' work. Some claim that their family members (TBI victims) were bewitched as a result of revenge. They did people wrong in different ways and they were bewitched as a result. The TBI victims also mentioned that they were victims of witchcraft. One participant revealed that he was a victim due to jealousy while the other was a victim of revenge. He believed that his accomplishments were a motivation.

According to Ngulube (as cited in Tembo ,1993) , there are seven motives for being a perpetrator of witchcraft; loaning, seeking revenge, jealousy of someone's achievements or wealth, cruelty directed randomly at others, punishment for close relatives' wrong deeds, and individuals being driven into witchcraft because they have been possessed by evil spirits. These motives for witchcraft, as the case in traditional society, mean that anyone can become a witch or can be a victim of witchcraft. One can be a victim of witchcraft if one is perceived by close social acquaintances as being very rich, too powerful, selfish, too arrogant and boastful, daring, has too many wives and children, too happy, too old, or too beautiful. This is also apparent in the findings because one of the participants believed that their husband has been bewitched because of his wealth.

6.2.3.2. Punishment from the ancestors

In traditional African culture, people believe in ancestors and they believe that ancestors are to be thanked and acknowledged every once in a while and if one does not do that, it can result in consequences. The results of the study revealed how ancestors are not to be disrespected. One of the participants mentioned that their family member angered the ancestors by interrupting an ancestral ceremony. One of the TBI victims supported their family member and mentioned that he has never thanked the ancestor and that someday he disturbed an ancestral ceremony

which might have angered the ancestors and resulted in him getting into an accident and getting injured.

According to Baloyi and Makobe-Rabothata (n.d) ancestors protect and provide guidance to those in the material realm and therefore are highly respected, venerated and very important to the community of the living. There is therefore continuous and unbreakable communication and connectedness between the living and the living dead. For the traditional African people the deceased is believed to be living in the ontology of the invisible intangible beings. According to Afeke and Verster (2004) ancestors influence the daily lives of the living, and it is believed that as they can bring either adversity or benefit, they must either be appeased or encouraged to bless.

6.2.3.3. God's will

Findings revealed that even though some participants' perceptions were culturally-rooted, some perceptions were influenced by religious beliefs. They also show that some participants believed that it was God's plan for the accident to happen and that it was also his plan for the people to be in the physical and mental state that they are in.

6.3. Implications for theory

According to the Afrocentric theory (Asante, 1990) Afrocentricity creates a proper understanding of Africans through their cultural value systems. It implies that Africans attribute everything in their lives according to their cultural values. Their beliefs are culturally-rooted. Culture is very important in the African culture.

Findings from the current study are in line with the theory. The theory states that the reality of Africans is based on their beliefs. The participants proved this by mentioning their beliefs in either God or their ancestors and they attributed the cause of the accidents that resulted in TBI to their beliefs.The Afrocentric perspective seeks people to think from an African's viewpoint. It seeks for the people to look at things

from an African way. Africans have their own way of doing things and Afrocentricity promotes an emphasis on the African culture. According to Mazama (2001), Africans should make their African social and cultural experiences as their ultimate reference.

6.4. Contributions and recommendations

Despite the limitations reflected above, this study has contributed to the understanding of perceptions of TBI held by African families. Furthermore, it has shed a light on African culture. it has revealed causes and understanding of this condition from the view of an African. This study also contributes to existing literature on African culture.

Recommendations

- Further research is needed to understand and explore African perceptions of TBI.
- Further research is also needed to explore the African culture and their belief systems and how their beliefs play a role in how they perceive the impact of TBI
- There is also a need for South Africans to adopt a cross-cultural approach when addressing mental and physical health issues. More research should be done on patients whose preference is to incorporate the Western and traditional healing methods.
- Furthermore, there should be opportunities for regular dialogue such as symposiums and conferences for medical and traditional practitioners to discuss the different treatment options.

6.5. Limitations

The researcher is aware of the considerable limitations of the study. Firstly, translating the interview data from Sepedi to English might have led to omission or inappropriate substitutions of the original rich material provided by the participants.

Second, this study relied on the perceptions of a portion of Africans and their perceptions do not represent the whole African community

Third, this present study did not consider other factors such as the level of education, age, gender, religion and socio-economic status that could impact perceptions.

Last, the results of this study cannot be generalized to the larger South African population since the study was conducted on a limited sample.

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APPENDICES

Appendix A: Questions (English Version)

The patient

Did you know of traumatic brain injury prior the hospitalisation?

How do you perceive all that has happened?

What do you think is the cause of the incident that has lead to the injury?

What difficulties have you been faced with since the incident?

Which physical difficulties are you having due to the injury?

Do you have any memory problems since the injury?

The patient's caregiver

When spoken of traumatic brain injury, what comes to your mind?

How do you perceive all that has happened?

What do you think is the cause of the incident that lead to the injury?

What changes you have noticed in the patient?

What kind of things is the victim doing now that she/he was not doing prior the incident?

How does the patient act towards you now?

How has the incident changed the relationship between you and the patient?

What do you think could have led to the occurrence of the incident?

What difficulties have you been faced with since the incident?

Appendix B: Dipotšišo (Sepedi Version)

Dipotšišo tša molwetši

Naa o kile wa ba le kgobalo ya bjoko pele ga kotsi?

Naa o tšea se se hlagileng bjang?

Naa o nagana gore ke eng seo se hlotšeng kotsi ye?

Ke mathata afe ao o bilego le ona morago ga kotsi?

Ke mathata afe a mmele ao o bago le ona ka morago ga kgobalo?

Naa o nale mathata a go gopola ka morago ga kgobalo?

Dipotšišo tša mohlokomedi wa molwetši

Naa ge go bolelwa ka kgobalo ya bjoko, go tla eng monaganong wa gago?

Naa o tšea se se diragetšeng bjang?

O nagana gore ke eng se se hlotšego kotsi ye?

Ke diphethogo dife tše le di bonago go molwetši?

Naa ke eng se molwetši a se dirago gona bjalo; se a bego a sa se dire pele ga kotsi?

Naa molwetši o phela bjang?

Naa kotsi e fetošitše tswalano ya gago le molwetši bjang?

O nagana eng ka se se diragetšego?

Ke mathata afe ao o bago le ona morago ga kotsi?

Appendix C: Consent Form

This is a research study of Phalane Koketso Emelia (200900666) for the fulfillment of Masters' degree in Psychology at the University of Limpopo, Turfloop Campus. The purpose of this study is to "*explore african families' perceptions of traumatic brain injury in the limpopo province"*. Your participation is voluntary, and you have the right of withdrawal at any given time and no costs will be incurred. Anonymity and confidentiality is assured. Your participation is highly appreciated. Please fill in the following below.

I participant number **……..** has read and fully understood the nature of the study.

I hereby consent to participate in this research study.

Participant's Signature **……**

Date **……**

Researcher's Signature **……**

Date **……**

Appendix D: Foromo ya Tumelelano

Ye ke nyakišišo ya Phalane Koketso Emelia (200900666) ya go feleletša dinyakwa tša lengwalo la Masetase wa Saekolotše Yunibesithing ya Limpopo, khamphaseng ya Turfloop. Maikemisetšo a nyakišišo ye ke go lekodiša dikgopolo ka kgobalo ya monagano malapeng a MaAfrika, Profenseng ya Limpopo ("*explore African families' perceptions of traumatic brain injury in the Limpopo Province*"). Ga se kgapeletšo go khatha tema, ebile o na le tokelo ya go lesa go kgatha tema nako ye nngwe le ye nngwe ye o e ratago, o sa lefe selo. Go kase bolelwe leina la gago, le tšohle tšohle tse o di boletšego di ka se botšwe motho. Ke leboga go kgatha tema ga gago. Ke kgopelo tlatša tše di latelago:

Nna mokgathatema wa nomoro ……, ke badile kaba ka kwišiša seemo sa nyakišišo ye.

Ke dulema go kgatha tema nyakišišong ye.

Mosaeno wa mokgathathema ……..

Tšatšikgwedi ……..

Mosaeno wa monyakišiši …….

Tšatšikgwedi ……..

Appendix E: Letter of Permission to the Limpopo Department of Health

539 Zone 4
SESHEGO
0742
07 October 2015

Head of Department
Department of Health
Polokwane
0700

Sir/Madam

RE: Request to conduct research on Traumatic Brain Injury (TBI) patients

I, **Koketso Emelia Phalane**, Student No. **200900666**, hereby request permission from the Department of Health to conduct research on patients that are treated for Traumatic Brain Injury (TBI) at the Provincial hospital in the Capricorn District. The purpose of my research study is to find out the perceptions held by families that are affected by Traumatic Brain Injury (TBI). I am looking for 5 patients that have been treated for Traumatic Brain Injury.

Attached please find my research proposal and ethical clearance from the University of Limpopo, Department of Research Development and Administration.

Thanking you in advance.

Yours sincerely,

……
Ms Koketso Emelia Phalane
ID No. 9003230370087
Cell No. 079 619

Appendix F: Approval Letter from the Limpopo Department Of Health

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Latif Shamila

Ref:4/2/2

Phalane KE
University of Limpopo
Private Bag X1106
Sovenga
0727

Greetings,

RE: African families perceptions of Traumatic Brain Injury in the Capricorn District, Limpopo Province: An Afrocentric perspective.

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
   - Research must be loaded on the NHRD site (http://nhrd.hst.org.za) by the researcher.
   - Further arrangement should be made with the targeted institutions.
   - In the course of your study there should be no action that disrupts the services.
   - After completion of the study, a copy should be submitted to the Department to serve as a resource.
   - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   - The above approval is valid for a 3 year period.
   - If the proposal has been amended, a new approval should be sought from the Department of Health.

Your cooperation will be highly appreciated.

Head of Department

18/12/15
Date

Appendix G: Letter of Permission to the Provincial Hospital

539 Zone 4
SESHEGO
0742
28 January 2016

The Executive Clinical Manager
Polokwane Provincial Hospital
POLOKWANE
0700

Sir/Madam

REQUEST FOR TBI PATIENTS' PARTICIPATION FOR RESEARCH STUDY

I, **Koketso Emelia Phalane**, hereby ask for your assistance to find relevant people for my study. I am conducting research on the "Perceptions of African people who have endured trauma to their head (TBI) due to motor vehicle accidents (MVAs).

My aim as stated in the provided proposal as to understand the perceptions of TBI victims and their families.

I am asking for management to help me with 5 TBI victims who have been patients in your hospital, particularly those that are from rural areas in the Capricorn District.

Your assistance will be highly appreciated.

Yours faithfully

……..

Ms K.E Phalane (Researcher)

079 619 3420

E-mail: koketsophln@gmail.com

Appendix H: Approval Letter from the Provincial hospital (Pietersburg Hospital)

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF HEALTH

PIETERSBURG HOSPITAL

Re: Permission to collect data at Pietersburg hospital

Description

On the 24 February 2016, the Ethics Research Committee of Pietersburg hospital approved the research protocol **of Miss Koketso Phalane** for the degree of Master of Arts in Psychology.

Title: African families' perception of traumatic brain injury (TBI) in the Capricorn district, Limpopo Province: An Afrocentric Perspective

Student Name: Koketso Phalane

Student Number: 200900666

Ethics Committee Research Chair Name DR F.L.M. HYERA.

Ethics Committee Research Chair Signature _____

16/03/2016.

Appendix I: Ethical Clearance Certificate from the University of Limpopo

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2212, Fax: (015) 268 2306, Email:noko.monene@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

MEETING: 06 May 2015

PROJECT NUMBER: TREC/28/2015: PG

PROJECT:

Title: African families' perceptions of traumatic brain injury in the Capricorn District, Limpopo Province: An Afrocentric perspective

Researcher: Ms KE Phalane
Supervisor: Dr S Govender
Co-Supervisor: N/A
Department: Psychology
School: Social Science
Degree: Masters in Psychology

PROF TAB MASHEGO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: **REC-0310111-031**

Note:
i) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.**
ii) **The budget for the research will be considered separately from the protocol.**
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

Appendix J: Transcripts of individual interviews

Participant 1

Researcher: Did you know of traumatic brain injury prior the hospitalisation?

Participant: *"I have never heard of TBI before I was involved in the accident. I started hearing of the term when I was in hospital"*

Researcher : How do you perceive all that has happened?

Participant: *"Medically it might be termed TBI and believed to have certain effects but I don't believe this is TBI. TBI did not cause my accident and it surely cannot be the cause of my disability"*.

Researcher : What do you think is the cause of the incident that has led to the injury?

Participant: *"Women"*

Researcher: How did the women cause the accident?

Participant: *Women are dangerous. They will bewitch you because you couldn't love them the way they wanted you to love them. I had a lot of women but there was a particular one who told me straight up that she would deal with me and this was because I told her I couldn't be with her. I was more certain she had something to do with my accident when one of my sisters told me she got a call from her, saying I got what I deserved, she was not one to be played with".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"I cannot do stuff for myself and that is a bit frustrating looking back. I cannot provide for my little sisters and hustle like a man. This accident has degraded my manhood. I feel like a small boy and no one respects small boys. I used to be respected, my presence was felt but now I am nothing because of witchcraft"*

Researcher: Which physical difficulties are you having due to the injury?

Participant: *"I am a vegetable, I do nothing. I cannot go to friends because I get tired very easily. I have to lie down. I get moved from one place to another and I have to be carried like a baby"*

Researcher: Do you ever forget things? If yes, how often do you forget and what kind of things do you forget?

Participant: *"I am forgetful most of the times but my two little sisters help me a lot"*

Participant 2

Researcher: Did you know of traumatic brain injury?

Participant: *" I have heard of the term traumatic brain injury prior to his accident but I didn't know about it"*

Researcher: How do you perceive all that has happened?

Participant: *"Eish (sighs). All that has happened is bad because my brother was punished for a stupid thing, for the stupidest thing ever. Love. It saddens me a lot. All that has happened is the work of an evil person"*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: "*My brother had a very good mind for business and he was very successful in all his business ventures. With money came different women. We used to warn him against his player ways. He changed women almost every day….. Weeks prior to his accident, two women fought for him and when he dumped one of them, she told him he has messed with the wrong girl. After the accident, she called me and asked me to tell my brother that he got what he deserved and that she was not one the foolish girls he had played. I believe she bewitched him for revenge".*

Researcher: What changes you have noticed in the victim?

Participant: *"Ever seen how a baby is? That is my brother now. he is a vegetable. We look after him now, the roles have switched"*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *"He cannot take care of himself, he sleeps a lot. He gets tired very easily ever since recovering".*

Researcher: How does the victim act towards you now?

Participant: *"We don't interact much but he doesn't say much or show any emotion. He is forever moody but I believe it's the effect of witchcraft. Where witchcraft is involved, nothing is ever good."*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: *"My brother was our friend and father. We spoke to him about everything and he was always there to protect and support us both financially and emotionally. But all that has since changed because we hardly spend time together, he spends most of his time sleeping. If we talk about old times, it might bring back memories and we are afraid it might hurt him. We have become more of his helpers than little sisters. Our relationship has changed a lot".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"All I can say is that everything is a mess and living with a disabled person is difficult, your life changes a lot."*

Researcher: TBI brings about a lot of physical and mental problems, do you know that?

Participant: *"The doctors explained it to me but I do not believe it. I don't take it because I know what and who put him in this position."*

Participant 3

Researcher: Did you know of traumatic brain injury?

Participant: *“I knew nothing about TBI”.*

Researcher: How do you perceive all that has happened?

Participant: *“How can one perceive witchcraft? It’s scary, All that has happened makes me respect and be even more scared of witchcraft”.*

Researcher: What do you think is the cause of the incident that led to the injury? **Participant:** *WITCHCRAFT nothing else* (raising voice). *I swear on my mother’s grave. What you are seeing here (pointing at her brother) is the work of a powerful witch. I believe he was bewitched. It might be his business rivals but I think it’s some girl he dated. She did warn him and now look at him. My sister got a call from her saying she is glad that he got injured and that she taught him a lesson”.*

Researcher: What changes you have noticed in the victim?

Participant: *“My brother has a changed a lot. A lot. It will take the whole day for me to pin-point what has changed. He takes times to understand things. On some things are worse but on some things are better. We become hopeful that he will fully recover but he forgets a lot and does not remember a lot of things but with each passing day, he is getting better”.*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *He was an active, happy person but he has become moody. He is part of the furniture, all he does is eat, sleep, eat and sleep. He is no longer interested in things.*

Researcher: How does the victim act towards you now?

Participant: *“We don’t interact very often but when we do it’s not like the old times. It’s like we bore him”.*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: ***"****My brother was my buddy, my partner in crime. My drinking partner but now I'm all alone. I am now more of his helper than his buddy. The accidents and witches of this community have taken my buddy away from me. Even when we do spend time together, I don't know what to say and what not to say to him".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Stress, financial problems have become a part of our lives ever since he got into the accident."*

Researcher: TBI brings about a lot of physical and mental problems, do you know that?

Participant: *"ahhhh these people always have an explanations for things but they do not know the truth and reality of things"*

Participant 4

Researcher: Did you know of traumatic brain injury prior the hospitalisation?

Participant:*"I didn't know anything about TBI. I knew about TBI after I was involved in a car accident*

Researcher: How do you perceive all that has happened?

Participant: *"Ha ha ha (laughing). Witchcraft is witchcraft how does one perceive witchcraft?"*

Researcher: What do you think is the cause of the incident that has led to the injury?

Participant: *"I believe it is witchcraft but doctors have their own explanations to these things. When they did not succeed with the accident, they made me crazy. Sometimes it takes three people to help calm me down. I can't explain what will be happening but I believe it would be the works of the witches who put me in this condition. I thank the doctors for helping me but I am now shielded by muti".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *I had pains and I was not mentally right.*

Researcher: Which physical difficulties are you having due to the injury?

Participant: *"I experienced physical and mental complications. I would swear at people and lash out at the. I could not stand people after I was released from hospital. I can't tell you what was happening to me but i was like a mad person. I acted mad until my family was told by the doctors that my behaviour stemmed for the head injury because my brain was affected I acted that way. I have good and bad days".*

Researcher: Do you ever forget things? If yes, how often do you forget and what kind of things do you forget?

Participant: *YES*

Participant 5

Did you know of traumatic brain injury?

Participant: ***"****No, I have never heard of TBI prior to the accident. Those are just white people's terms and we cannot know of them. Ask me about African stuff, I know a lot and I might even be able to explain how some things come about. The reason why most of us do not get healed is because we focus on white people's diseases and their terms*

Researcher: How do you perceive all that has happened?

Participant: *"What has happened is very sad. I wish I had the powers to heal him or take back what has happened"*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: *"My little brother might have endured trauma to the head but that was not the cause of his current state. Doctors told us its brain injury but it is witchcraft*

because he got into an argument with some old man and the old man told my brother that he was going to deal with him and he was going to "feel" it for the rest of his life. He was going to regret "stepping on his toes" and a day after he was involved in an accident, but he survived although his mental state is bad. He is sometimes mad and it's because of that man"

Researcher: What changes you have noticed in the victim?

Participant: *"One thing for sure he has changed a lot. My brother is not the person he used to be. I'm telling you, people that used to know him back in the days will be shocked, his thinking has changed and his memory is bad but one day he will be OK".*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *"The things I have mentioned like being forgetful and obviously being physically challenged".*

Researcher: How does the victim act towards you now?

Participant: *"How does he act?? Eish, he is sometimes moody or act as if I bore him and so on".*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: ***"****My brother was my buddy, my partner in crime. My drinking partner but now I'm all alone. I am now more of his helper than his buddy. The accidents and witches of this community have taken my buddy away from me. Even when we do spend time together, I don't know what to say and what not to say to him"*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Choosing what to say and what not to say for him to not be offended. Things like taking care of an adult baby. It's difficult and strainous"*

Researcher: TBI brings about a lot of physical and mental problems, do you know that?

Participant: *"There is no such, this is all witchcraft. Do you know how smart witches are? They have ways of hiding their doings by making it seem like an illness"*

Participant 6

Researcher: Did you know of traumatic brain injury?

Participant: *"I am not educated that's why I don't know these modern things. TBI must be a modern term or a western term because I have never come across such".*

Researcher: How do you perceive all that has happened?

Participant: *"My son might have endured trauma to the head but that was not the cause of his current state. Doctors tell us It is brain injury but this is witchcraft"*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: *"My son was an obedient boy but I believe what happened that day was because of a witch. The doctor's claim is brain injury because they do not understand that witchcraft is there. It is the cause of the accident and when he did not die during the accident, they made him a crazy person. You cannot get injured during a car accident and go mad, that is highly impossible. The ones that have bewitched know what they have done to him, I believe they possess his soul. He is different to the person he was prior to the accident".*

Researcher: What changes you have noticed in the victim?

Participant: *"Ahhhh do you know a zombie"*

Researcher: YES, why?

Participant: *"I'm asking you because if you know how zombies are then you'd understand how my son was after being discharged from hospital. He has improved very much but he has changed a lot".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Taking care of him and calming him down when he has seizures"*

Researcher: TBI brings about a lot of physical and mental problems, do you know that?

Participant: *"What I know is that, when you are bewitched. You are bound to have changes both mentally and physically. It was the aim of the witches".*

Participant 7

Researcher: Did you know of traumatic brain injury prior the hospitalisation?

Participant: *"I did know that it was possible for one to get head injury but not for it to affect the brain and be in this state".*

Researcher: How do you perceive all that has happened?

Participant: *"All that has happened was bound to happen. I was meant to be in that accident and it happened."*

Researcher: What do you think is the cause of the incident that has lead to the injury?

Participant: *"What happened on that day was God's plan. Even my current state is because of his will. Everything that happens is because of Him. I believe this was God's plan. We have no control over the things that happen or that are going to happen. The accident was not anybody's fault but God had his own plans, she is alive. It would have been hurtful and depressing for my family had I died but then again it would be God's plan. God knows everything and His will has been done".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"I cannot fend for my family and it is really bad"*

Researcher: Which physical difficulties are you having due to the injury?

Participant: *"After that I was discharged but I could not do anything for myself. I was like a baby, things were done for me. I was fed, bathed and would be accompanied*

to the toilet and It is still like that. I couldn't do anything for myself and my speech was gone. When people were talking to me, I would want to answer but nothing would come out. I struggled to get back to normal. I can't walk that means I can't work. I experience physical pains and a terrible headache every now and then".

Researcher: Do you ever forget things? If yes, how often do you forget and what kind of things do you forget?

Participant: *"I still struggle with remembering things"*

Participant 8

Researcher: Did you know of traumatic brain injury?

Participant: *"I've never heard of it and I still don't get it. The way the doctors explain it, is almost impossible to believe. A mere accident will cause TBI and the TBI changes a person's whole being?*

Researcher: How do you perceive all that has happened?

Participant: *"All that has happened is because of jealousy, nothing more. When people are jealous of your achievements, this is what is bound to happen. They will bewitch you".*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: *"I am not one to talk about witchcraft but I believe this was caused by witchcraft. People would talk about our family due to jealousy and witchcraft was their way of eliminating the rich family. He is now paralyzed and there won't be any money coming in. I believe they bewitched him, took his soul and they are using him to run their businesses. There is a man who has not on good terms with my father, as I am speaking he has started doing business and he is doing what my father used to do"*.

Researcher: What changes have you noticed in the victim?

Participant: *"He hardly talks and he is depressed in a way"*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *"My father was not a lazy person. We were born into a well-off family and people did not like that at all. He is now paralysed and there won't be any money coming in*".

Researcher: How does the victim act towards you now?

Participant: *"Ahhh he acts in the way the witches of this world wanted him to act. They wanted him to sit and do nothing and that is exactly what he does. Sometimes he just sits with us and says nothing".*

Researcher: What do you mean by "the way the witches of this world wanted him to act"

Participant: *"Exactly that. What I know is that when you are bewitched, the witches become in control of your spirit and life"*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: *"My father was my hero, he was a strong man. I used to admire his strength as an old man. I can't even spend five minutes with him without feeling sorry for him. I am now his helper and he has become like a baby. Our relationship has become that of helper and baby"*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Seeing my father in this state hurts me a lot. The time and effort it takes to care for a disabled person is too much. It becomes even more difficult when the person is an adult. Another difficulty is that money is not coming in"*

Participant 9

Researcher: Did you know of traumatic brain injury?

Participant: *“I didn’t know of TBI”.*

Researcher: How do you perceive all that has happened?

Participant: *Yohh… All that has happened shows the power of witchcraft. Some people are dangerous.*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: *“My husband of 35 years has been a very hard-working person and people were jealous of his achievements I believe this is witchcraft. Men his age are struggling to make ends meet and he has a lot of cattle. We made a lot of money from the cattle. Two of our sons bought him a tractor and he made even more money. The jealousy must have multiplied and they bewitched him”.*

Researcher: Did you know of traumatic brain injury?

Participant: *“There are too many changes but the significant one is that he is depressed. He is too depressed and he hardly laughs these days”.*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *‘He was a hard worker because he was physically able but now it is difficult’.*

Researcher: How does the victim act towards you now?

Participant: *“He hardly talks to me but he is getting better now. But I believe it is frustration. He is probably depressed because he cannot do stuff for himself”*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: *“It has changed”*

Researcher: How has it changed?

Participant: *“It has changed in a sense that he used to be my friend and we used to talk and laugh a lot but it is no longer like that these days”.*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Taking care of him is difficult, a lot. And our finances are very bad."*

Participant 10

Researcher: Did you know of traumatic brain injury prior the hospitalisation?

Participant:*" I didn't know about TBI. The first time I heard of it was when I was in hospital, days after waking up from a coma and I heard doctors talking to my family about it. It is only after I had fully recovered that I got to understand it".*

Researcher: How do you perceive all that has happened?

Participant: *I do not believe this is TBI*

Researcher: What do you think is the cause of the incident that has led to the injury?

Participant: *People are dangerous. Family members, relatives, neighbours, colleagues, nobody is ever happy when one succeeds. I believe I am in this state because people were jealous. Everything happened so fast for me. I was blessed with a good paying job, I bought a car and people saw that my mother's life will get improve and it did not sit well with them, they did what they did and I believe they succeeded.*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"I wasn't okay for a very long time. I can't walk, I have to be carried from point A to B. I have a three year old son. I cannot play with him. I cannot go work for him*

Researcher: Which physical difficulties are you having due to the injury?

Participant: *"I have a three year old son. I cannot play with him. I cannot go work for him because I cannot walk and my other hand is not working properly. If this is TBI, I respect it but I do not believe TBI can leave you crippled".*

Researcher: Do you ever forget things? If yes, how often do you forget and what kind of things do you forget?

Participant: *Not really, I wish I could forget all that happened (laughing).*

Participant 11

Researcher: Did you know of traumatic brain injury?

Participant: *"No, I didn't know anything about TBI".*

Researcher: How do you perceive all that has happened?

Participant: *I am more scared of witchcraft now more than ever*

Researcher: Why are you scared of witchcraft?

Participant: *My son was bewitched for his achievements and now doctors claim it is witchcraft.*

Researcher: So do you think that is cause of the incident that led to the injury?

Participant: *"My son graduated from a university in Johannesburg. They bewitched him because straight after he got a job, he bought a car and because of jealousy he got involved in a car accident. People never want to see other people's children success, instead of encouraging their own to work hard and succeed. They find pleasure in seeing others fail".*

Researcher: What changes you have noticed in the victim?

Participant: *"My son was a talkative, a very active person. And whenever he was home, he would help fix things around the house but now since the accident. He is not able to do them".*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *"Like I said, he cannot help with anything since his one hand and legs are no longer functioning."*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Financially we are struggling and there is nothing I can do to help. His girlfriend is also not working but we are surviving."*

Researcher: TBI brings about a lot of physical and mental problems, do you know that?

Participant: *"The same with witchcraft, they will make you blind, unable to talk or walk, that is how powerful witchcraft is".*

Participant 12

Researcher: Did you know of traumatic brain injury?

Participant: *"I did know of brain injury but I did not think it was this serious. I knew that one could get an injury to the head but I didn't know of the term and the consequences. If this is TBI then it is a serious thing".*

Researcher: How do you perceive all that has happened?

Participant: *"all that has happened was very unfortunate"*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: *"He must have been driving very fast and that led to the accident"*

Researcher: What changes you have noticed in the victim?

Participant: *"He is a bit moody"*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: *"We used to go out a lot, as a couple. We would have weekend-aways twice in a month. Some Fridays we would go clubbing but that has since changed. We hardly even kiss. I don't even remember the last time he told me he loved me"*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"We do everything for him"*

Participant 13

Researcher: Did you know of traumatic brain injury prior the hospitalisation?

Participant: *"I have never heard of TBI before and I knew nothing about it"*

Researcher: How do you perceive all that has happened?

Participant: *"One of the doctors explained what caused my disability and mentioned that is was TBI, although I did not know about TBI but he took his time to explain what it was and what has happened to my body. I do believe it is TBI but TBI caused by angry ancestors"*

Researcher: Why do you think it was your ancestors?

Participant: *"We as Africans have forgotten our ways and adopted the Western culture. All that has happened was a lesson not to neglect my cultural ways and not to forget about them".*

Researcher: Do you mean that the ancestors are the cause of the incident that has led to the injury?

Participant: *"YES, I did not want to hear of the word "badimo" (ancestors) and "go phasa" (ancestral ceremony). I was living life according to my own rules. I think my fore-fathers, grand-fathers and grand-mothers were angry at me, which is why I had that accident. I also remember coming in drunken one day and some of the relatives were here for an ancestral ceremony and I ruined everything. After recovering from the accident I started believing that maybe the ancestors were angry with me for not acknowledging them and for disrespecting them".*

Researcher: What difficulties have you been faced with since the incident?

Participant: *"Not being able to do stuff for myself, my wife struggling to take care of me. She is getting old, she needs to rest but she it's like she has a baby "*

Researcher: Which physical difficulties are you having due to the injury?

Participant: *"I am disabled, I cannot do stuff for myself".*

Participant 14

Researcher: Did you know of traumatic brain injury?

Participant: *"I didn't know what it was and I still don't know what it is. I heard of it when my husband was hospitalised. The doctors mentioned it and I was surprised. They could see that I was surprised and my endless questions were a give-away".*

Researcher: How do you perceive all that has happened?

Participant: *"All that has happened is bad and it serves as lesson not to disrespect ancestors"*

Researcher: What do you think is the cause of the incident that led to the injury?

Participant: *"My husband has been paralyzed for over 3 years now…. He must have angered the ancestors because before he had the accident, I had a little ceremony to thank our ancestors but because he was a heavy drinker, he came in and disrupted the rituals. ……Ancestors are very important in our lives as Africans. So what he did that day must have angered them and they warned him by paralyzing him. Ancestors are not to be disrespected".*

Researcher: What changes you have noticed in the victim?

Participant: *"He is my adult baby, I now know when he is mad. He wants me to get him something"*

Researcher: What kind of things is the victim doing now that she/he was not doing prior the incident?

Participant: *“His memory and thinking is slow “*

Researcher: How so?

Participant: *“He now forgets people’s names and has to be reminded time and time again about who the people are”.*

Researcher: How has the incident changed the relationship between you and the victim?

Participant: *“I am now more of his helper”*

Researcher: What difficulties have you been faced with since the incident?

Participant: *“All our children are working in other provinces and I have to take care of him alone, it is very depressing but I have to do it.”*