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INDIGENOUS KNOWLEDGE OF TRADITIONAL HEALTH PRACTITIONERS IN THE MANAGEMENT OF *RIGONI*: GROUNDED THEORY APPROACH

by

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DECLARATION

I, Steppies Richard Rikhotso, hereby solemnly declare that the thesis: Indigenous knowledge of traditional health practitioners in the management of *rigoni*: grounded theory approach, presents the work carried out by myself and to the best of my knowledge does not contain any materials written by another person, except where due reference is made. I further declare that all the sources used or quoted in this study are acknowledged in the reference list accordingly; that the study has been approved by the Ethics Committees of the University of Pretoria, the Makhado Traditional Health Practitioners Association and its members involved in the study.

…… 13 February 2017

S.R RIKHOTSO **DATE**

DEDICATION

This thesis is dedicated to:

- My mother Mamaila Rikhotso, who was eager to understand the studies of an adult working person.
- My brother Samuel Rikhotso for gradually and timeously checking on my academic progress on daily basis.
- My twin-brother by birth month and date son Masiza Rikhotso for his understanding that the laptop is for daddy's work and provided me with space to work.

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ABSTRACT

Indigenous knowledge of Traditional Health Practitioners (THPs) in the management of *rigoni* is of paramount importance for the indigenous practitioners by exploring, describing and documenting their practices. There was limited evidence of the indigenous knowledge of Traditional Health Practitioners in the management of *rigoni*. The indigenous knowledge healing of *rigoni* is not documented by the THPs and Indigenous Knowledge Holders (IKHs), as a result there is limited literature on illnesses that are managed by THPs and IKHs. The main aim of the study was to develop a substantive theory that explains and describes childhood illnesses such as *rigoni* that are categorised by THPs and IKHs and not documented, thus remain unknown in Vhembe District, Limpopo Province of South Africa.

The population of the study are THPs and IKHs who were members of Makhado Traditional Health Practitioners' Association; residing in Vhembe district. The sample size was determined by theoretical saturation. The study was conducted in three sections. The first section dealt with the understanding and meaning of *rigoni,* the second section focused on exploration and description of the indigenous knowledge of THPs and IKHs in the management of *rigoni* and the third section dealt with analysis of the concept "indigenous knowledge (IK) healing of *rigoni"* with the purpose of developing a substantive grounded theory. Data collection and analysis were concurrently done, where individual, face-to-face interviews were conducted with THPs and IKHs. The findings obtained during the initial and focused coding did not bring out clearly the concepts, thus the concept analysis was sought to assist in the development of the theory. Concept analysis of the concept "Indigenous knowledge healing of *rigoni"* confirmed the healing practices of *rigoni* by THPs and IKHs. Traditional health practitioners and indigenous knowledge holders narrated the healing process of *rigoni* amongst infants and their mothers, though there was lack of written evidence on the indigenous practices, using tacit knowledge as their work is not documented, but shared orally from generation to generation.

Due to the undocumented indigenous knowledge of THPs and IKHs, Western medical practitioners label illness such as *rigoni* as "unknown or ill-defined", as their laboratory tests and autopsy fail to display the results.

Traditional health practitioners and indigenous knowledge holders confirmed that they use various herbal and animal products to comprehensively heal *rigoni*. The findings also revealed that biomedical practice and indigenous practice does not collaborate for patient care, as the work of THPs and IKHs are considered unscientific by some biomedical health

professionals. From the concept analysis, a theoretical definition of "Indigenous knowledge healing of *rigoni"* was formulated from the concepts which linked together, and ultimately developed a theory. Further studies need to be conducted to facilitate the laboratory testing of the tissue which THPs and IKHs excise from the maternal vaginal wall as a way of treating *rigoni*. The healing process of *rigoni* as performed by THPs and IKHs need to be documented. An Indigenous Knowledge System on the healing of illness need to be included in the training of health care professionals, and collaboration between the two health care settings to be fast tracked, as the practise of THPs and IKHs is regulated by Traditional Health Practitioners Act (Act no.22 of 2007). The developed grounded theory will be documented for utilisation in the healthcare institutions, nursing colleges and universities curriculum to assist during the teaching of health care professionals on the diverse care of patients from diverse cultures.

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LIST OF ABBREVIATIONS AND ACRONYMS

THPs	TRADITIONAL HEALTH PRACTITIONSERS
IKHs	INDIGENOUS KNOWLEDGE HOLDERS
IK	INDIGENOUS KNOWLEDGE
WHO	WORLD HEALTH ORGANIZATION
SANC	SOUTH AFRICAN NURSING COUNCIL
MDGs	MILLENNIUM DEVELOPMENT GOALS
SDGs	SUSTAINABLE DEVELOPMENT GOALS

CHAPTER: 1 INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Millennium Developmental Goal 4 (MDG4) called for a reduction in infant mortality of two-thirds in 2015 and this goal was not achieved in South Africa and other countries (Republic of South Africa MDGs 2015:10). The United Nations introduced 17 sustainable development goals (SDGs) to replace the MDGs. Sustainable Development Goal 3 focuses on ensuring healthy lives and promotion of wellbeing for all people of all ages (United Nations Report 2016:16). The UN Report (2016:4) indicated that globally about 5.9 million infants died in 2015 from preventable causes and treatable illnesses.

An example of such a situation is seen in one of South Africa's academic hospitals in Gauteng that reported an increased infant mortality rate from infections at 26.8% (Lloyd & de Witt 2013:518). Bryce et al. (2005:1147) reported that some of the causes of the increased infant mortality rate were unknown due to inaccurate recording of information in death registers. In indigenous communities within the Southern African Development Community (SADC), infants demised as a result of people's diseases or illnesses, which are sometimes referred to as "man-made illnesses" and are untreatable in biomedicine (Van Wyk, Bourne, Gericke, Mokoena, Mulaudzi, & Van Wyk 2009:33; du-Preez, Cameron & Griffiths 2009:343).

A study conducted in Ghana revealed that some ethnic groups considered severe unknown illnesses to be 'not-for-hospital illnesses' because the illness is considered untreatable in biomedicine, but curable with home remedies and can be treated by Traditional Health Practitioners (THPs) using traditional medicine or herbs (Bazzano et al. 2008:126). People have diverse understanding and interpretations of various illnesses based on beliefs, culture and practices.

A study conducted by Mulaudzi and Makhubela-Nkondo (2006:46) identified *rigoni* as one of the diseases that can be treated by THPs only. These authors' view was also confirmed by a study conducted in KwaZulu-Natal that concluded that some infant illnesses such as *Iplayit* can only be treated and managed indigenously by THPs (Sharkey, Chopra, Jackson, Winch & Minkovitz

2011:384). "*Iplayit*" is the isiZulu name given for infant illness *rigoni*. However, both groups of co-authors did not indicate how THPs manage the illness indigenously. For this reason this study intended to explore, describe and document the understanding and interpretation of *rigoni* illness further. On the basis of the participants' narrations (THPs and IKHs), a substantive grounded theory (GT) was developed.

1.2 BACKGROUND

In 2012, the South African Medical Research Council (SAMRC) reported that 14.8% of infant deaths was caused by ill-defined and unspecified causes (the South African Medical Research Council 2012:45). The South African Medical Research Council (2014:13) reported that the infant mortality rate was 28 per 1000 live births and this high number was exacerbated by the lack of birth registrations of infants. According to Statistics South Africa (Stats SA) (2014:3), citing Berhan and Berhan (2014), in developing countries such as South Africa, the infant mortality rate may be high, but because of inadequate and improper documentation of information on both the numbers and causes of infant deaths within South Africa, the reports are not appropriate. Statistics South Africa reported that the infant mortality rate was at 34 per 1000 live births in 2015 (Statistics South Africa 2016:5).

The infant mortality rate cannot be adequately accounted for, as some infants do not die in hospitals or clinics. Infants can die while sleeping in cot beds and their deaths are classified as cot deaths. Cot death, commonly known as "sudden infant death syndrome" (SIDS) refers to the sudden, unexpected and unexplained death of an infant under 12 months in its sleep (Horne, Hauck & Moon 2015:1). According to Horne et al. (2015:1), cot death accounts for about 50% of all infant deaths in Western countries. Sudden infant death syndrome accounts for about 80% of infant deaths worldwide and only 20% of cases present a clear cause of death and undisputable infections (Kinney & Thach 2012:795).

Some of the illnesses and infections that are unaccounted for as causing infants' mortality may be diagnosed and managed by THPs and independent knowledge holders (IKHs). This is a common practice in developing countries and, if THPs and IKHs are not involved in the diagnosis, treatment and management, infant mortality rates may increase, as THPs play a primary health care role within the communities (Semenya & Potgieter, 2014:2).

Traditional health practitioners are highly respected and recognised within South African culture. For this reason, THPs are consulted for a wide range of physical, social, and emotional problems and also assume the roles of medicine healer, priest, psychiatrist, advisor, diviner, and herbalist (Van Wyk et al. 2009:36; Tabi et al. 2006:53). This view is supported by van Niekerk (2012:105) who states that African populations believe and follow traditional practices to acquire value from the THPs' experiences. THPs in South Africa have been legalised and practise according to the Traditional Health Practitioners Act no. 22 of 2007 (Traditional Health Act no.22 of 2007:6; Mulaudzi in van Wyk 2009:32). The Act defines a THP as a person registered in one or more categories of THPs, which include diviners, traditional doctors/herbalists, traditional surgeons, spiritual healers and traditional birth attendants (Mulaudzi in van Wyk 2009:36). Ross (2010:46) also categorises THPs into diviners, herbalists, faith/spiritual healers, traditional surgeons and birth attendants, who have a strong belief that they get strength from God. The participants in this study fell into the categories of diviners, herbalists and IKHs.

It is claimed that eight out of every ten South Africans consult THPs in conjunction with or in preference to biomedicine medical professionals (Ross 2008:17) as influenced by their culture-based folk beliefs (Holland & Hogg 2010:4). Some indigenous African elders within the family or community indoctrinate mothers of infants to consult THPs when suffering from any diseases or illnesses, as these elders strongly believe that illnesses have a specific cause or purpose.

According to Nyota and Mapara (2008:190), some illnesses that are treated through indigenous knowledge are known by different names and dimensions that are unique to that community or ethnic group. Birhan et al. (2011:3) support the idea that THPs are successful and effective in treating some illnesses within the community. Other diseases or infections treated by THPs include sex-related infections (Semenya & Potgieter 2014:2), such as *rigoni,* as *rigoni* is classified as an infection transmitted during the sex act (Mulaudzi & Makhubela-Nkondo 2006:52).

Sexually transmitted infections (STIs) are a challenge in sexually active mothers, especially when preparing for pregnancy (Blas et al. 2007:314). Transmission of STIs from a pregnant woman to her foetus, new-born baby, or infant can occur before, during, or after birth. Other STIs including gonorrhoea, genital herpes and genital warts can be transmitted to infants during vaginal delivery. Some of the infections or illnesses are named according to culture-bound syndromes, local concepts, local names, perceptions and symptoms of illnesses (Towns, Eyi & Andel 2014:2), such as *rigoni.*

Mrisho et al. (2012:2) assert that illnesses that are undiagnosed may eventually result in an unknown cause of infant mortality. *Rigoni* is viewed as a condition that causes complications that may contribute to the high infant mortality rate. Scientific evidence recommends that better patient outcomes can be achieved if biomedicine medicine and traditional health practice collaborate (Mark & Chamberlain, 2012:99; Campbell-Hill et al. 2010:612). Therefore, this study aimed to develop a substantive theory that explains and describes childhood illnesses that are categorised by THPs and IKHs and remain unknown.

1.3 PERSONAL AND PROFESSIONAL MOTIVATION FOR THE STUDY

The researcher is a professional nurse trained in Western perspectives regarding health care of infants and their illnesses. As an Accoucheur, the researcher has worked in maternity units where infants were born with birth marks, red spots, Stork bites and various skin problems. The researcher observed and learned that mothers of new borns had different views and made different meanings of the red marks that appear on the infant occiput and neck area. The literature was consulted to clarify these differing views and meanings but no clear explanations emerged from an indigenous perspective. The researcher chose the indigenous knowledge of THPs put to use in the management of *rigoni* as the focus of his doctoral study because of his cultural socialisation. Some of the infants of the researchers' family members were sent by elders for the management of *rigoni* at THPs and survived, while infants whose parents refused to follow the elders' advice lost their infants through undiagnosed illnesses.

Biomedicine practices and health professionals have disregarded and undervalued THPs' indigenous knowledge in the management of some illnesses that are sexually transmitted. As a result, reducing infant mortality from unknown causes through biomedicine is difficult. This challenge of failure to reduce infant mortality from unknown causes in biomedicine motivated the researcher, who respects the services of THPs in the management of illnesses, including childhood illness, to undertake the study with the aim of developing a theory that might explain and describe the indigenous management of *rigoni* in reducing infant mortality.

1.4 PROBLEM STATEMENT

The researcher is an African healthcare professional, born and bred in Vhembe district, Limpopo Province, where cultural beliefs and traditional practices are maintained. Owing to his cultural

socialisation the researcher always felt overwhelmed when innocent infants demised from infant illnesses such as *rigoni*, which can be manage by THPs.

Birth spots or birth marks called "*Stork bite / nevus simplex spots"* are noted on the new born immediately after delivery. *Stork bite* is a congenital capillary malformation, usually pink and flat, found on the forehead, eyelids, nose, upper lip, or back of the neck. In biomedicine it is viewed as a condition that has no long-term complications and fades within 12 months of life (Hockenberry, 2005:268). *Stork bite* is not the only birth spot that can be noted immediately after the birth of the infant: *Mongolian spots,* grey, blue or purple in colour, can also be noted. These spots can be found on the posterior sacral area and buttocks of infants, and disappear within the first four years of life (Hockenberry, 2005:268).

In contrast to these birth spots, *rigoni* is described as a red localised spot on the occiput of an infant born of a mother suffering from STIs. The infant contracts *rigoni* while in utero or during normal vaginal birth (Mulaudzi & Makhubela-Nkondo 2006:49). An indigenous African belief is that *rigoni* is treated only by THPs who use traditional medicine or herbs from specific plants and animal products (Sharkey, Chopra, Jackson, Winch & Minkovitz 2011:384, Mulaudzi & Makhubela-Nkondo 2006:52). The researcher considered the possibility, founded on this description, that *rigoni, Stork bite* and *Mongolian spots* are different conditions affecting infants. Therefore, the need exists to explore, describe and document the understanding and interpretation of *rigoni* illness in order to develop a substantive theory on how this infant illness is indigenously managed by THPs and IKHs.

To address the problem statement presented above, the following questions were developed to assist in exploring, describing and documenting the understanding and interpretation of *rigoni* in Vhembe district in Limpopo Province of South Africa:

- What is the THPs and IKHs' understanding of the meaning of *rigoni*?
- How do THPs and IKHs, through their indigenous knowledge, manage *rigoni*?
- How can a theory be constructed that will explain and describe the indigenous knowledge of THPs and IKHs in the management of *rigoni* in Vhembe district in Limpopo Province of South Africa?

1.5 AIM AND OBJECTIVES

The aim of the study was to construct a substantive GT that explains and describes indigenous knowledge of THPs in the management of *rigoni* in Vhembe district, Limpopo Province. The objectives of this study were:

- To explore and describe the meaning of *rigoni,* according to THPs and IKHs.
- To explore and describe how THPs and IKHs, through their indigenous knowledge, manage *rigoni*.
- To construct a substantive GT based on the findings of the first two objectives.

1.6 SIGNIFICANCE OF THE STUDY

According to Lobiondo-Wood and Haber (2006:51), the significance of a study comprises the possible ways in which the study's findings add to the body of scientific knowledge. This study might add new knowledge to the already existing indigenous knowledge of THPs and IKHs in the management of infant illness *rigoni*. The study could assist biomedicine practice and healthcare professionals to care for infants suffering from *rigoni* through a refreshed understanding of the phenomenon and its management, which could contribute to reducing the infant mortality rate from unknown illnesses. The study may open the possibility of co-operation between Western medicine and indigenous healing practices.

The outcome of the study was to produce substantive GT that explains the management of *rigoni* through indigenous knowledge of THPs in Vhembe district. The study sought to unearth the tacit capability, skills and indigenous knowledge of THPs in treating and managing infant illnesses and or infections such as *rigoni*, which cannot be treated or cured by means of conventional biomedicine.

1.7 RESEARCH DESIGN and METHODOLOGY

1.7.1 Research design

The term "research design" refers to the plan, structure, strategy and the blue print of research that guided the research process (Polit & Beck 2008:68). A GT design was used, underpinned by indigeneity within an indigenous knowledge system (Chilisa 2012:13). The design assisted in identifying concepts that explained the management of *rigoni* through the indigenous knowledge of THPs. The identified concepts were included in the development of the substantive theory. The research design further helped to develop explanations of key social processes, such as indigenous knowledge of THPs in the management of *rigoni*, derived from empirical data (Glaser & Strauss, 1967:5).

The researcher followed Corbin and Strauss (2008:12), where there is no preconceived theory. The researcher has to use empirical data provided by the participants for the emergence of theory to happen (Corbin & Strauss 2008:12).

1.7.2 Methodology

The GT method was used to understand the meaning of infant illness *rigoni* and its management through the indigenous knowledge of THPs. Grounded theory fit well with indigenous methods of research, as the THPs gave narratives that produced more information, and theory was developed from the ground with THPs as the knowledge holders. In Vhembe district in Limpopo Province of South Africa, both THPs and non-THPs expressed their own local and specific realities as regard indigenous knowledge of treating *rigoni.*

This methodology was a perfect fit for the study, as the aim of the study was to develop a theory that might explain indigenous knowledge of THPs in the management of *rigoni,* and a theory does not currently exist (Barnett 2012:48). The methodology is discussed in detail in Chapter 3 of this study.

1.8 ASSUMPTIONS OF THE STUDY

The paradigmatic assumptions of the study are the basic principles of qualitative research that the researcher believes to be true without verification or without evidence being provided. These principles can be obtained from a philosophical framework of studies (Burns & Grove, 2009:40; Polit & Beck, 2008:14). A research paradigm is a way of describing the worldview and is informed by the philosophical assumptions about the nature of reality. Research paradigms are ways of knowing ethics and value systems, and the theoretical assumptions and the approach used for the study (Chilisa 2012:20; Corbin & Strauss 2008:89; Denzin & Lincoln 2005:3). The paradigmatic perspective includes ontology, epistemology, and axiology as well as research methodology:

1.8.1 Ontological assumptions

Ontology is concerned with the nature of social reality (Ramey & Grubb, 2009:80; Dillon & Wals, 2006:550; Dyson & Brown 2006:33). The researcher used a GT methodology, underpinned by a lens of indigeneity to understand the nature of social reality of THPs in the management of infant illness *rigoni* through their indigenous knowledge. Multiple realities were reported as evidenced by using multiple quotations from the THPs and hearing their perspective on the management of *rigoni* through their indigenous knowledge.

1.8.2 Epistemological assumptions

"Epistemology" refers to the claims made about potential means of acquiring knowledge of social reality, whatsoever social reality is assumed to be (Blaikie 2007:21; Dyson & Brown 2006:33). Epistemology is concerned with how knowledge will be co-created and communicated between the researcher and the THPs to address the infant illness *rigoni*.

1.8.3 Axiological assumptions

"Axiology" refers to the analysis of values to understand better the meanings, characteristics, origins, purpose, acceptance as true knowledge and the influence values have on people's daily experiences. The researcher ensured accountability, respect, and reciprocal appropriation and adhered to indigenous, African-tradition cultural rules and rituals (Chilisa 2012:22) of the THPs and IKHs out of respect for cultural rites when he was communicating with them (THPs and IKHs).

1.8.4 Methodological assumptions

"Methodology" refers to the ways of determining knowledge of reality, the ways of generating and justifying an allowable and acceptable knowledge (Blaikie 2007:22; Dyson & Brown 2006:33) and the way knowledge is gained from what exists. The researcher inductively developed a theory by interpreting data generated by a study of the phenomena that the theory represents (Glaser & Strauss 1968:6). In this way the theory was grounded in empirical data peculiar to Vhembe district.

1.8.5 Theoretical perspectives

This study was conducted from an indigenous knowledge system perspective, as the researcher believes in and socialised within the indigenous, cultural norms and African traditional practices. The

researcher has some familiarity with the history and philosophy of and the myths surrounding (Mkabela 2005:180) the THPs who manage infant illness *rigoni* within Vhembe district.

The study was underpinned by a lens of indigeneity (Merlan 2009:304) embedded within the indigenous knowledge system (Chilisa 2012:13). As a lens within IKS, indigeneity was appropriate for the study, as it is anchored in social, cultural and traditional practices of knowledgeable indigenous people, including THPs. The perspective on indigeneity was the researcher's worldview, interaction and interpretation of social reality (Merlan 2009:305; Gegeo 2001:493). The study incorporated values and beliefs of indigenous people in the design, methods, data collection and analysis of the research (Lavallée 2009:23).

Indigenous knowledge systems' research methodologies are centred on respect, indigenous knowledge healing, transformation and mobilisation of the indigenous people, such as THPs. The researcher engaged with THPs with respect and questioned how they managed *rigoni* through indigenous knowledge. In Vhembe district both THPs and IKHs expressed their own local and specific realities as regard to indigenous knowledge of treating *rigoni*.

The study focused on a local phenomenon that is context sensitive and creates locally relevant constructs and methods that are derived from local experiences, perspectives and indigenous knowledge (Chilisa 2012:13) of THPs and IKHs.

1.9 CONCEPT CLARIFICATION

The central concepts for this study are explained in nine subheadings:

1.9.1 Traditional health practitioners (THPs)

A traditional health practitioner is:

someone who is recognized by the community in which he/she lives as competent to provide a holistic conceptualization of the wellness and well-being of the individual and his/her family members by using traditional medicine based on the social, cultural and religious regarding physical, mental and social well-being of members of the community.

(Ross, 2008:17; Traditional Health Practitioners' Act no. 22 of 2007:8; Moodley et al. 2008:153). In this study THPs are indigenous health practitioners who are likely to treat and manage *rigoni* using their indigenous knowledge and experience gathered from ancestors and elders down the generations.

1.9.2 Indigenous knowledge holders

These knowledge holders are community members who possess indigenous knowledge that has been developed within an indigenous community and has been conformed into the community's cultural practices (Republic of South Africa, Government Gazette No. 39910 of 8 April 2016:5). In this study IKHs are indigenous people, indigened within a particular community setting, who are knowledgeable and experienced about cultural, traditional practices for their daily lives.

1.9.3 Traditional medicine

Traditional medicine is used in traditional health practice to diagnose, cure and prevent illness and to maintain well-being (Nyika 2009:32; Truter 2007:56). According to the World Health Organization (2008), the term "traditional medicine" refers to the sum total of the knowledge, skills and practices indigenous to different cultures and that are used to maintain and improve health. The term covers the prevention, diagnosis, and treatment of physical, mental, and social illnesses. In this study "traditional medicine" refers to the knowledge, skills and practice used by THPs and IKHs for the indigenous management of *rigoni* in infants in Vhembe district.

1.9.4 Traditional health practice

"Traditional health practice" refers to the performance of a function, activity, process or service based on a traditional philosophy (Truter 2007:56). In this study "traditional health practice" refers to the utilisation of traditional medicine or herbs to treat and manage *rigoni.*

1.9.5 Infant

An infant is a very young offspring of a human being at its earliest period in life before she or he can walk, between the ages of one month and twelve (12) months. In this study, "infant" refers to any human neonate between the ages of 0 to twelve (12) months old, born of a mother suffering from *rigoni*.

1.9.6 Mother

A mother is a female parent of an infant (Horny 2010:962). In this study a mother is a woman who has given birth to an infant who is suffering from *rigoni* in Vhembe district, Limpopo Province.

1.9.7 *Rigoni*

It is the red spot or mark on the occiput of an infant born of a mother suffering from STIs unknown in biomedicine. The infant presents with poor eye contact with the mother, vomiting, respiratory distress and an uncontrollable cry, especially at night (Mulaudzi & Makhubela-Nkondo 2006:49). The study focused on a local phenomenon *rigoni,* which is a sexually-related illness affecting infants. The illness is characterised by retracted neck, red marks at the back of the neck, and a sunken anterior fontanel (Sharkey, Chopra, Jackson, Winch & Minkovitz 2011:384). *Rigoni* is referred to by different names according to the cultural and ethnic group living in a particular setting. Names include "*lekone"* (Sepedi), "*iplayit"* (isiZulu), "*Goni"* (Xitsonga), or even "*abantu* illnesses".

1.9.8 Management

Management is a set of activities rendered to the patient and his or her support systems in dealing with medical conditions and related psychosocial problems effectively to improve patients' functional health status. Management emphasises coordinated, comprehensive care along the continuum of disease (Bodenheimer & Berry-Millett, 2009:2). In this study "management" refers to the processes involved in the diagnosis, treatment and care of mothers and infants by THPs through indigenous knowledge, using African traditional medicine or herbs to manage and treat the infection *rigoni.*

1.9.9 Indigenous knowledge

Indigenous knowledge is the people's cognitive and wise legacy as a result of their interaction with nature in a common territory (Hart 2010:3). In this study "indigenous knowledge" refers to the established knowledge of indigenous nations, their worldviews, and the customs, cultures and traditions that direct their daily health life.

1.10 ETHICAL CONSIDERATIONS

The study was conducted after ethical approval of the Faculty of Health Sciences Research Ethics Committee (University of Pretoria) (Annexure F) and Makhado Traditional Health Practitioners

Association (Annexure D). All protocols for conducting a study on humans were followed; that is; informed consent (Annexure C), and ethical principles of beneficence, respect for human dignity and justice and inclusiveness, principle of fidelity and veracity.

1.11 CLASSIFICATION OF CHAPTERS

The name of the chapters in this thesis are:

Chapter 1: Introduction and overview of the study

Chapter 2: Paradigmatic and theoretical perspective of the study

Chapter 3: Research design and methodology

Chapter 4: Data analysis and presentation of the results

Chapter 5: Interpretation and discussion of the results

Chapter 6: Concept analysis: IK healing of *rigoni*

Chapter 7: Theory construction

Chapter 8: Limitations, recommendations and conclusion

1.12 SUMMARY

In this chapter, an overview described the study's goal as constructing a substantive grounded theory on indigenous knowledge of THPs and IKHs in the management of rigoni in Vhembe district, Limpopo Province (South Africa). The introduction, background and problem statement, which laid the base for the aims and objectives of the study, were set out. The research design, methodology and construction of the substantive theory were also described.

Chapter 1 concludes with the names of the chapters of the thesis. Chapter 2 provides the paradigmatic and theoretical perspective of the study.

CHAPTER 2: PARADIGMATIC AND THEORETICAL PERSPECTIVE OF THE STUDY

2.1 INTRODUCTION

Chapter 1 presented the reader with an introduction to and an overview of the study. Chapter 2 explains paradigmatic and theoretical perspectives that underpinned the current study. The aim of this chapter is to clarify for the reader the worldview(s) of the researcher. The chapter briefly draws on the journey of decolonisation of the people's mind regarding indigenous communities, as supported by the Traditional Health Practitioners Act (Act no 22 of 2007). The antique points in this chapter make up a background of traditional health practices, THPs, IKHs and their areas of specialisation. The chapter presents briefly the Western perspective on the infant illness *rigoni* and the indigenous perspectives and practices of THPs and IKHs. The chapter concludes with the benefits of using indigenous knowledge for the management of illnesses.

2.2 AFRICAN PHILOSOPHY

African philosophy is defined by Oyeshile (2008:62) as an attempt by philosophers to critically examine the traditional stories, myths, sooth sayings, religion, education, socio-political organisations and other aspects of African culture through creative critical examination and logical methodologies that are not peculiar to the Western culture. "Philosophy" refers to rational critical thinking about the general nature of the world, the justification of belief or theory of knowledge, and the conduct of life (Kanu 2014:87).

According to Letseka and Venter (2012:2), African philosophy covers four trends: ethno-philosophy (communal African customs, taboos and folk philosophy), philosophic knowledge, nationalist-ideological philosophy (African leaders) and critical or professional philosophy. "African philosophy" in this study refers to the ethno-cultural, indigenous practices founded on the communal customs and traditional folk knowledge shared from one generation to the next since the existence of mankind on the African continent.

2.3. LENS OF INDIGENEITY

"Indigeneity" originates from the word "indigenous" meaning born or produced naturally in a particular land or region; native or belonging naturally within the land (Concise Oxford English Dictionary 2011:954). The United Nations is the forerunner of the global expansion of indigeneity as a form of activism (Merlan 2009: 303). Hence, from the indigeneity movement there have been acceptances, rejections of the concept from different communities and even claims by those that "indigeneity" does not apply to, like whites in South Africa. Indigeneity is seen as a sphere of commonality among those who form a world collectively of "indigenous peoples" (Merlan 2009: 303). A worldview on indigeneity is anchored in indigenous people's ways of knowing and doing things (Merlan 2009: 303).

Most importantly, "indigeneity" refers to an identity that links culturally distinct and origin-based existence to historic experiences of indigenous people for their cultural survival (Arndt 2014:79). According to Radcliffe (2015:2), indigeneity comprises the socio-spatial processes of everything that existed before all that is considered biomedical or modern. The quality of indigeneity is based on cultural distinctiveness, social networking and environmental knowledge. In this study, indigeneity is strictly used in terms of the ontological-, epistemological- and methodological suppositions that guided the current study.

An in-depth literature search was conducted to determine the indigenous work on *rigoni* and its management by THPs and IKHs. However, the search yielded limited documentation on *rigoni*. Documentation is limited, and somehow undocumented on illnesses such as *rigoni* as indigenous illnesses and their herbal management are considered sacred and secret information, which the ancestors do not approve for general publication. This point was supported by Msuya and Kideghesho's (2009:94) study that traditional healers do not disclose some of the names of herbs to researchers, as the plants are sacred and the healers fear exploitation. Of interest, the research deliberated on different traditional practices, knowledge of THPs and IKHs and their different specialities of practice. Section 2.3.1 discusses the researcher's Western perspective on infant illnesses as a trained professional nurse, with support from the literature.

2.3.1 Western perspective of the illness *rigoni*

Western practices believe that an illness should be diagnosed and treated based on scientific information which relies on theory, scientific knowledge and research to understand the mechanism underlying an illness (Carteret 2011). Illnesses are viewed in the Western perspective from the

aetiological, anatomical and physiological changes of the human body and pathophysiology to determine the base for the use of medicines, diagnosis and treatment (Carteret 2011).

The Western biomedicine approach is based on Western science, which focuses on technology to diagnose and treat illnesses because an illness is caused by microorganisms (such as viruses and bacteria) (Barnard 2012:7). This is the belief from the germ theory used by Western practitioners. The illness *rigoni* is viewed and classified as birth marks, stork bite and Mongolian spots (Siemionow & Eisenmann-Klein 2010:182) that are harmless for the infant. When the infant's health deteriorates and he or she cries incessantly, has a sunken fontanel and is dull, dehydration occurs due to diarrhoea and vomiting, poor feeding etc.

The researcher has experienced that infants presenting with signs and symptoms of *rigoni* are admitted into biomedical practice, rehydrated with fluids and given biomedicines to suppress diarrhoea and vomiting. Some of the infants receiving this care do not improve and deteriorate further, resulting in silent death. The biomedical practitioners register the infant's death as sudden infant death syndrome (SIDS), or unknown cause of death (Kinney & Thach 2009:795). This unknown cause of death will be confirmed by the autopsy results performed post the death of the infant.

2.3.2 Indigeneity perspective of *rigoni*

The researcher has seen and observed mothers who have opted for traditional healing when biomedical practice could not determine the cause of infant illness. While serving at the hospital as a professional nurse, the researcher came across indigenous mothers who used to disappear from the hospital unit or request a pass out to consult THPs and IKHs in private. On their return to the baby clinic or for check-up the infant has improved, with no signs of *rigoni.* Some mothers opened up to the researcher about where the infant received the management of *rigoni*. During this study, the researcher consulted one paediatric nurse, experienced and retired, regarding her knowledge on *rigoni* as an infant illness. The nurse confirmed that mothers of infants used to disappear from the unit to consult THPs and IKHs, returned with some herbs which they privately give to the infant to treat *rigoni,* without the nurses knowledge due to fear of stigmatisation and victimisation as indigenous healing was and is considered ancient by Western-trained personnel.

Traditional health practitioners and Indigenous knowledge holders who participated in this study were firm and consistent in their narrations regarding indigenous management of *rigoni* as an infant illness. Indigenous African people have beliefs in their cultural practices and their indigeneity. From an indigenous perspective, THPs and IKHs believe that all illnesses happen for a reason for an individual, the family, the community, society, and the nation.

Carteret (2011) used two systems of beliefs to understand the causes on an illness in indigenous communities; that is, personalistic and natural. An illness is believed to be caused by supernatural human beings with extraordinary powers, an ancestor or witch. The ancestor or witch enforces evil spirits to cause an illness as a punishment for failing to adhere to moral and spiritual cultural indigenous practices (Carteret 2011). In naturalistic system belief the health of indigenous people is interrelated and interconnected to the natural environment to maintain natural balance and harmony (Carteret 2011). The explanation of an illness in indigenous people is related to culture that is considered to be biologically inherited within the community, nationality and identity of the society (Vukic, Gregory, Martin-Misener & Etowa 2011:67). The healers further associate illnesses with disharmony between the body, the mind, the spirit and the environment in which indigenous people live.

Vukic et al. (2011:68) assert that an illness is multifaceted and can be given a descriptive and action-related name. The description and action-related naming of an ill in indigenous knowledge focuses on the interconnectedness and interrelatedness of everything in the universe, including human beings, plants, animals and the environment. For this reason the treatment is holistic to bring back harmony between the four aspects of human nature. The sick infant is taken to the THPs or IKHs by the family member after primary assessment by an elderly female from the family or a neighbour. The THPs or IKHs further perform assessments and observations, based on the history provided by the mother or grandmother. Traditional bones are consulted to confirm the alleged diagnosis before commencement of the treatment. The mother is also examined to exclude *rigoni*, as *rigoni* is believed to be transmitted by the mother to the infant. Thus, the treatment focuses on both mother and infant.

Traditional health practitioners and indigenous knowledge holders use natural herbs to treat *rigoni* for both mother and infant. An excision is made from the mother on the vaginal wall where *rigoni* is embedded. The excised products are mixed with herbs to form a concoction, which is applied on the incised occipital and neck area of the infant affected by *rigoni*. Some of the concoction is used by the mother during bathing, added into the infant's soft porridge and applied on the anterior fontanel.

The practices of THPs and IKHs are appreciated by indigenous communities for their ease of accessibility, their humbleness and are famous within their society for their trustworthiness. Community members believe that THPs and IKHs are part of them; thus, they trust these healers more than Western and biomedical practitioners in healthcare. Indigenous African people believe in humility, knowledge sharing and assisting each other in times of need. Consultation with THPs and IKHs continues because these healers have special sacred knowledge that they acquired from their ancestors to help the community with various plants and animal products.

This chapter demonstrates the uniqueness of the practice of THPs and IKHs in managing infant illness *rigoni* using the lens of indigeneity for indigenous people within the context of healing. The practice of indigenous knowledge healing of illnesses is holistic, and utilises the knowledge of elders, IKHs that includes THPs, the physical environment through indigenous knowledge transmission, the use of indigenous medicines or herbs and the performance of rituals and ceremonies (Vukic et al. 2011:70).

Both Western and indigeneity approaches to an illness aim at restoring the health of a sufferer, irrespective of their different approaches in the management of an illness like *rigoni*. Section 2.3.4 explains the reason for using a lens of indigeneity other than a Western lens for the study.

2.3.3 Why use a lens of indigeneity in the study?

Indigenous people were found in their land by the colonisers from the west and north, living and flourishing with their own indigenous systems (Gausset, Kenrick & Gibb 2011:136) of healthcare practices. The study used a lens of indigeneity to illuminate the work of THPs and IKHs in caring for indigenous people. The practices of THPs and IKHs consider the indigenous population as native and as of the origin of the land. Ethnic naming of illnesses and their management is part of the healers' practice. The indigenous management of *rigoni* uses concepts that are sacred and trusted by indigenous populations, following a shared cultural philosophy and shared values and customs (Robbins & Dewar 2011:2). Traditional health practitioners and indigenous knowledge holders in this study use indigenous herbs, perform rituals and ceremonies to bring harmony into the family of the infant suffering from *rigoni.* The healers' actions are to bring peace within the physical, mental, emotional and spiritual aspects of the infant's entire family (Robbins & Dewar 2011:3).

The study applies an indigenous research approach to produce, interrogate, validate and disseminate knowledge based on traditional indigenous people's worldview to connect the sacred physical and metaphysical realms of the society (Wilson 2008:61) in managing indigenous illnesses such as *rigoni.* The lens of indigeneity proceeds with the spiritual blessings of ancestors, cultural custodians within the local community and the environment. The study emphasises the recognition of THPs and IKHs as producers of legitimate indigenous knowledge (Dei 2013:35).

The indigenous knowledge of THPs and IKHs in the management of *rigoni* alerts the reader about tacit knowledge transmitted down the ages. Kovach (2010:40) argues that the use of an indigenous paradigm is relevant where participants share knowledge by narrating indigenous stories with the purpose of assisting other people in need. In this study THPs and IKHs relate stories to the researcher in order to help infants suffering from *rigoni* through the documentation of information for generation use.

A lens of indigeneity shows us the interrelationship that exists between the THPs and IKHs and the sick infant, the family and the community. According to Harris and Wasilewski (2004:489), the lens of indigeneity forms the core values of responsibility, reciprocity, relationships between the healers and the healed, and redistribution to maintain social harmony within the indigenous society. Traditional health practitioners and indigenous knowledge holders treat illnesses within the society as they are regarded as having an obliged kinship relationship with each other and relationship with animals and plants. Harris and Wasilewski (2004:492) emphasise that indigenous communities have a strong belief system, with caring being a responsibility of all people.

The obligation to care is reciprocal and circular, as all are interconnected for mutual benefit and, where possible, redistribute the knowledge and resources to reach equilibrium. The use of a lens of indigeneity in this study assisted the researcher to focus on THPs and IKHs, the indigenous practice of healing *rigoni*, and the performance of ceremonies and rituals before any work by THPs and IKHs is initiated. The researcher also focused on the belief system's ancestors, generational communication on indigenous knowledge sharing, self-confidence in healers' practice, and the trust and respect they receive from the community.

2.3.4 Traditional health practices in communities

The healthcare in the Sub-Saharan Africa region consists of three systems: biomedicine, traditional health practices, and the popular knowledge of elders / indigenous knowledge holders in the community (Towns, Eyi & Andel 2014:1, Rakuambo, du Toit & Soundy 2009:4). Towns et al (2014:1) and Van Niekerk, Dladla, Gumbi, Monareng and Thwala (2014:1) allude to the fact that that more than 80% of African populations access and use traditional medicine for their health. "Traditional health practice" refers to:

> the performance of a function, activity, process or service based on a traditional philosophy that includes the utilisation of traditional herbal medicine with the purpose of maintaining and restoring physical / mental health through diagnosis, treatment or prevention of a physical and mental illness; rehabilitation of a person to enable him or her to resume normal functioning within the family or community; or physical or mental preparation of an individual for puberty, adulthood, pregnancy, childbirth and death. It excludes the professional actions of people practising any of the western professions and any other activity not based on traditional philosophy (Republic of South Africa 2007).

Traditional health practices in African countries depend on cultural beliefs and tradition-bound folk practices of indigenous African people. South African communities seek and practise traditional healing and allopathic practices for illnesses of their family members, including infants. The concurrent use of traditional healing and allopathic practices by communities is referred by Ross (2010:46) as "medical pluralism" or "medical syncretism". The members of the community utilise any or a combination of the two practices for their benefit, as traditional healing is considered to be holistic in its approach.

2.3.5 Indigenous knowledge of traditional health practitioners

Indigenous knowledge is a local, native, cultural knowledge that has its origins in the people and their experiences contained by a geographically limited area, built upon and passed on verbally (Botha 2009:38). Coleman (2013:53) asserts that the knowledge and skills of indigenous people in the treatment and healing of illnesses is acquired from close relatives through verbal means and is not documented.

In most African countries, traditional health practitioners are believed to occupy esteemed positions within the indigenous communities they serve, as they employ a holistic integrative approach to their

healing practices (Ross 2010:46). Gibson (2013:2) states similarly that THPs attend to their clients holistically in the language of the clients with whom they interact and share with these clients a cultural background and a worldview in a familiar environmental setting.

The application of indigenous knowledge by THPs is based on the category of that THP and his or her expertise in particular illnesses or diseases. Traditional health practitioners include diviners *(isangoma / mungome / mungoma*), herbalists *(n'anga / inyanga / maine),* traditional birth attendants *(umvelethisi)* and traditional surgeon *(ingcibi)* as described by the Act (Traditional Health Practitioners Act 22 of 2007). The diviner is a person above 18 years who has undergone training for a minimum period of 12 months learning the diagnosis, preparation of herbs, and traditional consultation. The herbalist is a person 18 years and above who has been trained for a minimum period of 12 months in identifying and preparing herbs, the sustainable collection of herbs, dispensing herbs, and consultation. The traditional birth attendant is a female above 25 years who has undergone training for a minimum period of 12 months and has learned about conception, pregnancy, the delivery of a baby, and pre- and post-natal care (Government Gazette No. 39358, 2015).

The focus of this study was on three categories of THPs: diviners, herbalists and diviner-herbalists, including IKHs who specialise in infant illnesses or conditions and diseases in Vhembe district. The diviner provides diagnoses through spiritual means whereas the herbalist applies appropriate remedies or herbal medications to the client (Chigona et al. 2008:4). White (2015:5) contends that diviners seek input about the illness from the spiritual world by trying to understand the origin of the illness in order to prescribe the cure or treatment correctly, whilst herbalists use plants, leaves, barks, roots, etc. to treat the illness. Therefore, THPs involved in this study were diviners, or herbalists, or diviner-herbalists (as they practised both divination and herbalism) and IKHs (Rakuambo et al. 2009:4).

2.3.6 Traditional health practitioners, traditional health practice, and indigeneity

Traditional health practitioners' role in communities has been acknowledged for centuries in South Africa. In the 19th century, however, Western civilisation and Christianity viewed traditional health practice as illegitimate, unscientific and primitive.

Traditional health practitioners are highly respected and honoured in most parts of the country, within the communities they live and serve (Ross 2010:46). Traditional health practitioner practice was regarded as illegal prior to the democratisation of South Africa in 1994 (Van Niekerk 2014:1).

The traditional indigeneity of THPs and IKHs in Africa was criminalised by Western civilization, which practised Western medicine only. Such criminalisation led to the indigenous African population consulting THPs and IKHs in secret when suffering from illness. The sufferer would visit a practitioner of biomedicine medicine before and after the consultation with the traditional healer to determine the reason for becoming ill. Traditional health practitioners and indigenous knowledge holders perform different functions according to their categories or classification (Truter 2007:57). In South Africa, each ethnic cultural group has its own terminology for the THPs. Xhosa traditional healers are known as *ixwele* (herbalists) or *amagqirha* (diviners) (van Wyk, 2009:18); *n'gaka* and *selaoli* are the terms used in Sepedi and Setswana; while among the VhaVenda and VaTsonga people THPs are called *mungome* (Truter, 2007:57) and *n'anga* respectively.

The concepts underlying this varied terminology are set out immediately below:

2.3.6.1 Diviner diagnostician / *Sangoma*

A diviner is "a person who engages in traditional health practice and is registered as such under the Act Traditional Health Practitioners' Act No. 22 of 2007". (Government Gazette no. 39358 of 2015:8). The diviner uses his or her powers to access information that is normally beyond the reach of normal thoughts and forms part of their knowledge on communication with the spiritual world of the ancestors, spirits and gods (White 2015:3). Sodi et al. (2013:102) contend that diviners are mostly women who have the ability to explain, treat and manage illnesses from within the cultural context of their clients.

2.3.6.2 Herbalist / *Inyanga / Maine / N'anga*

"Herbalist" or "traditional doctor" refers to "a person who engages in traditional health practice and is registered as an herbalist under the Act" (Government Gazette no. 39358 of 2015:8). Herbalists are said to have extensive knowledge of herbs and herbal treatment (van Niekerk et al. 2014:20). They are very knowledgeable in the use of medicinal plants and other natural products (Coleman 2013:54). Herbalists are THPs who specialise in the use of herbal and other medicinal preparations for treating and managing diseases (Sodi et al. 2013:102).

2.3.6.3 Traditional surgeon

Traditional surgeon means "a person registered as a traditional surgeon under the Act" (Government Gazette no. 39358 of 2015:8). The traditional surgeon performs circumcision during ritual initiation at the traditional bush initiation schools (van Niekerk et al. 2014:20). A "traditional surgeon" in this study is a person considered by the community and society to have knowledge and experience of performing traditional male circumcision.

2.3.6.4 Traditional birth attendant

A "traditional birth attendant" refers to "a person who engages in traditional health practice and is registered as a traditional birth attendant under the Act" (Government Gazette no. 39358 of 2015:8). This person must have at least two children of her own for her to help during the birth process (van Niekerk et al. 2014:20). The category includes traditional midwives, usually older women, who assist in maternity care (Coleman 2013:54). Traditional birth attendants are elderly women who have been midwives for many years and are highly respected for their obstetric and ritual expertise and their specialisation in pregnancy matters (Truter 2007; Sodi et al. 2013:102).

2.3.6.5 Indigenous knowledge holders

Indigenous knowledge holders are mostly elderly people so their knowledge needs to be shared with younger generations for sustainability. Indigenous knowledge refers to the "knowledge which has been developed within an indigenous community and has been assimilated into the cultural make up or essential character of that community" (Government Gazette Bill No. 39910 of 2016:5).

"Holder" refers to "the indigenous community member from which indigenous knowledge originates" (Government Gazette Bill No. 39910 of 2016:5).

"Indigenous community" refers to:

> Any recognisable community of people developing from, or historically settled in, a geographic area or areas located within the borders of the Republic characterised by social, cultural and economic conditions which distinguish them from other sections of the national community, and who identify themselves and are recognised by other groups as a distinct collective. (Government Gazette Bill No. 39910 of 2016:5).

2.3.6.6 Spiritual or faith healer / *muprofeta*

A spiritual healer is a person who mixes Christianity practices with traditional beliefs (van Niekerk et al. 2014:20), lays hands on patients and prays for them and quotes verse(s) from the Bible. Faith healers are usually professed Christians of African faith-based churches or mission independent churches (Sodi et al. 2013:102). The spiritual healer has powers to communicate with the ancestral spirits, asking permission and advice to help the sick person.

2.4 SUMMARY

This chapter outlined the paradigmatic and theoretical perspective for the study. A brief explanation of indigenous knowledge of traditional health practitioners and indigenous African cultural practices was given to assist readers in understanding the services provided by THPs. Chapter 3 sets out and explains the research methodology that was followed in the study. The chapter covers an overview of GT, methods used and followed, data collection and analysis, and trustworthiness.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter presents the research design and methodology used to achieve the aims and objectives of the study. The methodology explains how data collection, analysis and, later, development of substantive GT and indigenous knowledge healing of *rigoni* were done. The background and fundamental guidelines common to different approaches to GT methodology (GTM) are provided. The study was conducted in four sections: section 1-meaning of *rigoni;* section 2-exploration and description of the IK healing of *rigoni* by THPs/IKHs; section 3-concept analysis of "IK healing of *rigoni";* and section 4- construction of substantive GT that explains the management of *rigoni*. The chapter concludes with a review of the ethical considerations related to the study.

3.2 CONSTRUCTIVIST GROUNDED THEORY: DESIGN AND METHOD

A constructivist GT design and the method for the study are discussed as they unfolded in this study below.

3.2.1 Research design

Babbie and Mouton (2008:74) define the research design as a blueprint for conducting a study that guides the planning and implementation of the study. Welman et al. (2009:46) refer to the research design as the overall plan, according to which the participants of proposed research are selected for data collection. According to Hair, Celsi, Money, Samouel and Page (2011:36), the research design represents a model or an action plan upon which the study will be built and conducted. The research design provides a road map in terms of sampling, data-collection instruments or tools and the analysis procedures. A grounded theory that is constructive and qualitative in nature was selected as the research design for this study.

3.2.1.1 Theory development

A theory is a creative, rigorous refocusing of the researcher's ideas to projects that are tentative, purposeful, and reflect the phenomenon according to the beliefs and values of the researcher (Chinn & Kramer 2008:182). "Creative" in this study as described by Chinn and Kramer (2008:182) refers

to the reliance on the process of theory development based on the interpretation by the researcher and participants (THPs / IKHs). “Tentative” indicates that the view may alter during the development of the theory. In this study a “theory” refers to understanding and construction of the meanings and actions of concepts from the study (Charmaz 2014:230). A theory grounded in the data can provide some degree of prediction, control and understanding of the phenomenon as it occurs in a real-life environment.

The theory that was developed or constructed from this study was substantive and not formal. It was substantive because it was contextually bound from one substantive area of study (Corbin and Strauss 2008:43); that is, in Makhado municipality in Vhembe district of Limpopo Province, South Africa. The lens of indigeneity was used to assist the researcher in developing the theory. The lens of indigeneity helped by focusing on the indigeneity of practices carried out by THPs and IKHs within their environment, Vhembe district. The researcher was socialised and raised in Vhembe district, but trained in the Western practices of being a professional nurse.

There was easy acceptance and understanding between the researcher and the THPs / IKHs after rapport had been created. Rapport was created during the initial visit to meet and discuss the study with the THPs and IKHs, and continued throughout the study at the local setting chosen by the participants, in Vhembe district. The researcher nursed and observed infants suffering from various illnesses, including *rigoni,* in Vhembe district hospitals. Some of the illnesses that infants suffered from were classified as query diagnosis or unknown and resulted in infant death with same diagnosis, or classified as “cot death”. Infants who were taken away from the hospital in a Western setting by their parents for indigenous healing are said to have survived the illness believed to be *rigoni,* but those who were not taken away from the Western setting by parents and diagnosed with an unknown illness did not survive.

The researcher had to focus on indigenous practices of treating the illness *rigoni* to reduce the infant mortality rate within Vhembe district of Limpopo Province. In this study, the focus was exploring, describing and documenting the indigenous knowledge of THPs / IKHs in the management of *rigoni*, by constructing a substantive GT within this context.

The four levels of nursing theory are: *meta-theory, grand theory, mid-range theory and the practice theory* (Walker & Avant 2011:6). According to Walker and Avant (2011:6), meta-theories focus on the theoretical and methodological approaches that relate to the development of a theory based in nursing. Therefore, the researcher classified the constructed substantive GT as belonging to the meta-theory level. A qualitative research and approach was used, a coding process and memoing and the constant comparison of empirical data and new data, and naming of the categories of

substantive data. Data was synthesised by linking the categories and their subcategories. The researcher tried to conceptualise from the categories and subcategories, but the concepts did not become clear. The researcher then followed Walker and Avant's (2011:160) eight steps for carrying out concept analysis in order for the purpose of developing a substantive GT. The process of concept analysis is described in Chapter 6 of this study.

3.2.1.2 Qualitative research

Qualitative research is defined as a systematic and subjective approach to research, which is used to describe the life knowledge and practices of people in order to provide a meaning of this life knowledge and these practices (Burns & Grove, 2011:71). For this study, a GT approach was followed because of the nature of the phenomenon: indigenous knowledge of THPs/IKHs in the management of *rigoni.* Inductive, holistic, emic, and subjective methods were used to understand, interpret, describe and develop theory of a phenomenon or a setting (Ingham-Broomfield 2008:35).

3.2.1.3 Brief overview of grounded theory methodology

"Grounded theory" refers to a set of systematic inductive methods for conducting qualitative research aimed at theory development from an analysis of the data produced (Charmaz 2014:343). Grounded theory methodology was originally described by Glaser (1967) (quantitative researcher) and Strauss (1967) (qualitative researcher) in the 1960s.

Although grounded theory was originally described by Glaser and Strauss in the 1960s, a review of the literature identifies a divergence in the original authors' views and development of grounded theory since their classic statements in 1967 (Glaser & Strauss 1967; Glaser 1978). The collegial relationship broke up between Glaser and Strauss and Strauss joined Corbin, creating two schools of thought on grounded theory. The Glaserian version was based on the original work and the subsequent writings of Glaser. The Straussian version was based on refinements Strauss made to the original version in association with Corbin (Charmaz 2014:5).

There is a third school of thought in which scholars have moved grounded theory away from the positivism associated with both Glaser and Strauss's and Corbin's versions of GT (Charmaz 2014:5). The researcher undertook to read more in the area of grounded theory methodology to familiarise himself with this methodology. The reading of grounded theory methodology was needed for the researcher to provide an opportunity to identify and understand some of the differences between the three schools of thought and which one to follow in the study: Glaserian / classical, Straussian and the constructivist grounded theory methodology approaches.
The Glaserian version of grounded theory has its ontological roots in critical realism.

Critical realism assumes that an objective world exists independently of the knowledge and belief of people and, as such, the researcher is considered to be independent of the research. This stance is in contrast with the Straussian version of the theory, which has its ontological roots in relativism where it is argued that reality comes from the interpretation of research data.

The constructivist version of GT (Charmaz's 2014:13) version, like the Straussian version, has its ontological roots in relativism. Glaser (1978) remained consistent with his explanation of the GT method for many years after his divergence from the ideas of Strauss (1967) in relation to the direction of the method.

Glaser (1978) defined GT as a method of discovery; the categories were discovered from the data and the method relied on empiricism, which was often direct and narrow and analysed a basic social process (Charmaz 2014:11). Strauss (1987) redirected the method to a more verifiable position in his discourse with Corbin (Strauss & Corbin 1998). Strauss and Corbin's (1998) version focuses on the use of new technical procedures for data analysis rather than placing the emphasis on the comparative methods of the earlier approaches to GT. Glaser's version is described as a more patient, relaxed approach that waits for the theory to emerge from the data. One of Glaser's criticisms of the Straussian version is that Strauss and Corbin's (1998) procedures of data analysis force data and analysis into preconceived categories, ignore the emergence of analysable data, which results in a description of concepts (Charmaz 2014:11).

According to Charmaz (2011:13), constructivist GT should adopt traditional GT guidelines. Therefore, the constructivist approach to GT assumes a flexible approach, and is in part a response to Glaser and Strauss's (1998) invitation in the original statement of the GT method for researchers to use strategies that are flexible in their own way. Charmaz (2014:16) provided the researcher in this study with a way of developing GT that considers the theoretical and methodological developments taking place throughout the years. Grounded theory methodology promotes the creation of a new theory that consists of interrelated concepts. A study guided by GTM aims to explain and predict phenomena based on existing substantive and empirical data. The data collection was triangulated by using in-depth interviews with participants (THPs and IKHs), using the researcher's physical presence, and taking field notes. Digital recording of participants' narrations confirmed the data and relevant literature provided support (Corbin & Strauss, 2008:27). GTM provides guidelines for data collection and analysis consisting of coding, constant comparisons between data, memo writing and theoretical sampling (Charmaz 2014). Data collection and analysis were done concurrently in this study, as it is a requirement in GTM.

3.2.2 Methods

The study was conducted in the following sections:

3.2.2.1 Section 1: The meaning of *rigoni*

Traditional health practitioners and indigenous knowledge holders attribute the meaning of the illness *rigoni* to ethnicity, cultural practice, activities that are occurring during the illness onset, the season of the year and environmental and climate changes. Sometimes the illness is related to animals, birds and plants, such as *rigoni, which* is the translation of "hawk", the bird. The hawk feeds on chickens, and the attack on chickens by the hawk is equated to the attack by the illness *rigoni* on the infant. The full discussion of the indigeneity perspective of *rigoni* is in chapter 2 (2.3.2) of this study.

3.2.2.2 Section 2: Exploration and description of the indigenous healing of *rigoni* by traditional health practitioners and indigenous knowledge holders

The concept of the indigenous knowledge healing of *rigoni* is explored and described in this chapter from Section 3.3 to Section 3.10.

3.3 Contextualisation of Indigenous knowledge system

The findings of this qualitative study were contextually inevitable, and therefore not to be generalised (Corbin & Strauss 2008:57; Torres 2009:61). It is essential to describe the characteristics of the context in which the management of *rigoni* was studied so that the veracity of THPs' and IKHs practices can be better understood. The findings may provide the contextual grounding for the substantive theory. An overview of the study context is presented for the logical contextualisation of the data.

The study was conducted in Vhembe district (one of the five districts in Limpopo Province, South Africa), within the Makhado municipality. Makhado municipality is one of the rural municipalities where indigenous African, traditional and cultural beliefs are practised and maintained by community members and the society at large (Semenya & Potgieter 2014:1). The study focused on THPs who were members of Makhado Traditional Health Practitioners Association (MTHPA) and IKHs within Vhembe district. The majority of the THPs and IKHs lived within a radius of about 25 kilometres from the central gathering area. The central gathering area is a community hall yard and, specifically, under the indigenous sacred *marula* tree (*sclerocarya birrea subspecies caffra)* as chosen by the participants for their convenience.

The gathering takes place under the indigenous *marula* tree because of its good shade. The tree is culturally protected by traditional customs, as it is believed that ancestors are pleased when indigenous traditional meetings and gatherings are held in a natural environment. This type of tree, according to Maroyi (2013:398), is termed "the tree of life" as it provides fundamental human needs for food, medicine, shade and utility timber. The use of indigenous trees and plants was supported by Cheikhyoussef and Embashu (2013:2) through these authors' opinion that indigenous fruit trees such as the *marula* play an important role in the lives of rural people within the Southern African Development Community (SADC). The use of the *marula* tree as a shade for meetings symbolises as a customary practice the link between the THPs, IKHs, traditional leaders and their family ancestors (Khosa 2013:56 up).

3.3.1 Ritual performance

Ritual is a language of the indigenous African people during which the living human world interacts with the divine or spiritual world of the ancestors. Rituals are performed to treat illnesses, defeat enemies, change people's social status and to remove impurity in the setting and from people (Shamsi, Faghfori & Booryazadeh 2015:1936). Rituals demarcate a symbolic sacred space and environment or territory in relation to an emotionally experienced collective identity as prescribed by indigenous tradition.

On the arrival of all members of the association and the researcher, the chairperson welcomed all members and introduced the researcher, especially to those who had missed the previous meetings. The members started to sing the indigenous ancestral traditional song, *'o ya khuluma inkosi'* (literally meaning "the chief is speaking"*)*. One of the THPs performs ritual practices and puts tobacco snuff on the ground, while the rest of the members clap hands as a way of acknowledging the activity and welcoming the spiritual world of the ancestors (Edwards 2010:220). Clapping hands indicates a sign of respect for the elders and for the ancestors and the spiritual world. Faces look down and members are on their knees to bless the proceedings of the day. The researcher as an African who believes in traditional and cultural practices, and is a member of the Indigenous Knowledge System and Community of Practice at the University of Pretoria, joined the ceremony and was not taken aback by the performance of indigenous rituals, as he was familiar with the practices performed annually in his home village.

3.4. The reservoir of indigenous knowledge

A population is the totality of all participants that conform to a set of specifications, comprising the entire group of persons that is of interest to the researcher and to whom the research results can be generalised (Burns & Grove, 2011:290). The population comprises the objects, subjects, people,

phenomena, cases, events or activities specified for the purpose of sampling (Brynard & Hanekom (2005:43).

The target population for the study included all THPs who are able to indigenously manage and treat infant illness *rigoni* in Vhembe district, Makhado municipality in Limpopo Province. The THPs had to be members of Makhado Traditional Health Practitioners' Association and registered under the Traditional Health Practitioners Act (Act no. 22 of 2007). They had to be experienced in the management of *rigoni* and be able to speak Tshivenda, Xitsonga and / or English, as the researcher was fluent in all the three local languages. Participants had to choose the language in which they wanted to be interviewed for ease of communication, self-expression and for self-confidence. This choice of language facilitated humility between the THPs / IKHs and the researcher. Participants were provided an opportunity to express their feelings and ideas when they interacted with the researcher. The promotion of humility was considered the theme of the Indigenous Knowledge Systems 4th interface conference held in 2016 in Venda, in which THPs and IKHs were provided with the opportunity to present their projects and participation in various projects.

The majority of the participants in the study were female THPs, with more than five years of experience in the indigenous African management of the infant illness *rigoni*. Some of the THPs were young (born in 1985) and others were old. There were male THPs who were able to manage *rigoni,* but they excused themselves from the study due to the African, traditional and cultural beliefs for respect of female clients. The men's excusing of themselves indicates that the indigenous management of *rigoni* by THPs is gender based.

At the inception of the initial interviews the researcher was concerned about the use of two dominant indigenous African languages in Vhembe district (Tshivenda and Xitsonga), as they might have posed challenges in translation, transcribing and in coding the data. However, the researcher was assured by Charmaz, (2014:114) who states that that people get to know the empirical world through the use of language and the action taken on it. The study was conducted in the language as selected by the participants to provide them with the opportunity to explain *rigoni* and its management, to reflect their cultural beliefs, values and practices. The Tshivenda and Xitsonga versions were translated into English for easy coding, and the meanings were verified with the participants to ensure accuracy.

3.5 Sampling

Sampling is the process of selecting a group of subjects or people for a particular study in such a way that the individuals represent the target population group from which they were selected (Oppong 2013:202, Burns & Grove 2011:40). According to Glaser and Strauss (1998:45), in GT the

researcher cannot predict the sample size of the study. Three sampling techniques were employed: initial-, network- and theoretical sampling. Theoretical sampling occurs when the researcher seeks and collects related data to enhance the categories in the emerging theory (Charmaz 2014:192). The initial sampling occurred when the researcher networked with the chairperson of the Makhado Traditional Health Practitioners' Association. The sample size of this study was reached when data analysis showed that saturation of the categories had been met, with no new categories emerging from the data (Charmaz 2014:192). The researcher employed theoretical sampling after the initial analysis and coding of the initial visit to interview the THPs and IKHs. The THPs and IKHs sampled were members of Makhado Traditional Health Practitioners Association found in Vhembe district, Makhado municipality around the Elim area.

3.6 Engaging the traditional health practitioners and indigenous knowledge holders

Data was generated over a period of six non-consecutive months. The researcher visited THPs during their monthly meeting of the Makhado Traditional Health Practitioners' Association in a specific community hall in Vhembe district, Makhado municipality. The specified venue was preferred for its centrality and safety, as there had been recent incidents of harassment, assault and killing of THPs. The researcher had to transport about four THPs from and to their homes because of transport challenges in their village. These were the THPs who were said to be experts in the management of the infant illness *rigoni*.

Intensive interviews were employed during the data-generation process. According to Charmaz (2014:57), intensive interviews are qualitative research interviews in which the participants talk and the researcher encourages, listens, and learns from the participants for the specific topic under study. The type of interview allowed the researcher to explore and describe the meaning of *rigoni* and the indigenous African management of *rigoni* by THPs. The intention was to co-create the meaning out of the discussion.

Through the individual, face-to-face, intensive interviews the researcher was able to engage with the data during the entire process of generation and analysis (Charmaz 2014:58). As the researcher conducted the interviews himself, the trustworthiness (methodological coherence, Morse et al. 2002:13) of the study was assured. In addition, congruence existed between the research objectives, research questions and the methodology that matched data collection and analysis. A total of 16 digitally recorded face-to-face, individual interviews were conducted with THPs and IKHs who manage and treat the infant illness *rigoni.* Additional interviews were conducted with specific participants for clarification of some concepts and to reach consensus. The last interview was carried out with a retired, experienced paediatric professional nurse who worked at the local paediatric hospital unit. It was useful to have her version of the illness *rigoni.*

The interviews were guided by an interview guide with a set of open-ended questions that were to explore the meaning of *rigoni* and its indigenous African management by THPs in Vhembe district, Limpopo Province of South Africa **(Annexure B**). The researcher was assisted in the formulation of the open-ended questions that covered the purpose of the study, without diverting from the main protocol questions developed by the expert supervisors. The initial meeting and discussion was a focus group, in the form of a pilot study to test the relevance of the questions, how the participants would respond, and also to monitor the quality of the digital recorder and its recording. The transcribed interviews were reviewed and demonstrated the adequacy of the initial questions to obtain relevant data and were, therefore, included in the analysis.

Even though the questions were open ended to stimulate the participants, the grand questions were: What is the THPs' understanding of the meaning of the *rigoni*? How do THPs, through their indigenous knowledge, manage *rigoni*? The posed questions allowed the participants to feel free and, where necessary, the researcher probed for clarity to cover concepts emerging from the data. This process, according to Charmaz (2014:161), is termed "theoretical sensitivity" and "theoretical sampling" (Charmaz 2014:192) in the GT. Further probing was also conducted depending on the THPs and IKHs' responses aimed at describing concepts in order to detect the features of each category. The participants were asked the same questions in fundamentally the same way. This pattern assisted the researcher in constant comparison of the data during the analysis.

Charmaz (2014:32) encourages the use of a digital recorder as it allows the researcher to engage with the participants during the interview and provides detailed data after the interview that the researcher may have missed. In this study, a digital recorder was used for capturing the interviews, translated into English for transcription. Some of the indigenous terms or concepts were not changed to ensure the essence of their meaning in an African indigenous cultural community; for example, "*thangu*" (traditional bones) and "*rigoni*". The researcher was able to listen to the recordings in a relaxed atmosphere, paying attention to what the participants were saying and checking for the correct translation and transcription.

Further exploration for certain concepts was carried out and aided by listening to the recording in the vernacular. The use of the digital recorder during the interviews did not stress the responses of the participants as they had given consent. Their non-verbal communication, posture and the tone of their speech indicated that they experienced a high degree of comfort and interest in discussing how they indigenously manage the infant illness *rigoni.*

Each interview lasted for 45 minutes or less, depending on the age, knowledge and experience of the participant. According to the biographic data of the participants, the most senior THPs took up much of their time in explaining the management of *rigoni* and in giving examples of infants they had treated from different cities of South Africa. During the initial interview visit, about 20 participants were interviewed as a group; this group was brought together to create rapport and build trust. The discussion was like a dialogue, where participants were given a chance to answer the questions individually within the group. The group was large as it was the first visit to create rapport and trusting relationship with THPs and Indigenous Knowledge IKHs. More time was spent by some participants who wanted to dominate the discussion by sharing their knowledge and experience on the phenomenon. Doody, Slevin and Taggart (2012:4) support the experience by the researcher of participants' dominance by stating that managing large-group discussions can be challenging for the researcher, especially on topics in which most participants are knowledgeable and involved. They all want to be heard.

The disadvantages of the focus group discussion is that one member might try to dominate the situation and, in this way, create challenges for the discussion and outcomes. The researcher had to urgently address these trends as they prohibited others from expressing themselves about the phenomenon under study, *rigoni* and its indigenous management. The researcher, chairperson and the THPs then agreed that the next gathering would ensure that the interviews were conducted individually for fairness. Field notes for each of the interviews were compiled during the interview, noting the participants' non-verbal communication, posture, tone of speech and any other noteworthy activities such as ringing of cell phones, performance of rituals, etc. All of the interviews were conducted in a busy community hall yard, with a street nearby and the school across the road. Some of the community hall rooms were being used as classrooms for pupils who were upgrading their matric results.

The interviews used to start at about 10h00 or sometimes 10h30 as a result of challenges with transport. The researcher had to fetch some of the key THPs in the indigenous management of infant illness *rigoni* from their homes, which were about 25 kilometres from the central venue. The venue was proposed by participants as they thought it was convenient for them.

3.7 DATA COLLECTION PROCESS

3.7.1 Negotiating entry

Gaining entry encompasses convincing people that the researcher has decided upon on who should be the participants that will provide relevant information (Johl & Renganathan, 2009:42). In conducting this study, the researcher managed to access the cultural and traditional practised field, especially on infant illness *rigoni* as a gender-sensitive topic to be discussed with females by the male person (researcher).

It was imperative for the researcher to build and gain the THPs' trust, respect and acceptance in order for him to conduct this study. Wasserman (2010:8) states that some communities require trust, transparency, and protection of their privacy, civil rights and liberties from researchers. Researchers who are considered outsiders in the field under study are sometimes unwelcome (Thompson et al. 2014:8), especially if the study is considered to be sensitive and awkward or the researcher does not comply with the practices of the setting (Widding 2012:424).

In this study the researcher followed Buchanan et al. (1988)'s four-stage access model as described by Johl and Renganathan (2010:44): "getting in", "getting on", "getting out" and "getting back". At the "getting in" stage the researcher contacted the chairperson of the MTHPA at the Indigenous Knowledge System conference in Pretoria, hosted by the University of South Africa, to discuss the aim and objectives, time and resources of the study. After the discussion, the researcher wrote an official letter to the MTHPA for the meeting with the members; that is, the THPs. Once access had been obtained, the researcher made an appointment to renegotiate entry and access into the actual lives of THPs at Makhado municipality, Vhembe district, Limpopo Province.

The researcher (a professional nurse and lecturer at the University of Pretoria) applied interpersonal skills that were acceptable to the THPs. He upheld the rituals of verbal and non-verbal communication, respect and truth telling to the elderly and complied with the ritual practices performed by THPs before and after the meeting. This behaviour strengthened the relationship with THPs and the second stage of getting on with THPs within their context. This relationship creation by the researcher and the THPs is further supported by Charmaz (2014:39), who states that meeting with participants and constraints experienced shape ongoing access to the setting, as well as the role and involvement of the researcher.

As for the "getting out" stage, the researchers and the participants made an agreement on when the study would commence and when the data-collection process would be terminated. The participants were reassured that the current research and their involvement would continue further than expected, as they (THPs and IKHs) might be part of indigenous knowledge system conferences and be part of discourse and dialogue related to their specialisation in maternal health and infant health care. This dialogue was to be conducted by the human immunodeficiency virus / acquired immune deficiency syndrome (HIV / AIDS) and indigenous knowledge systems community of practice (cop) group from the University of Pretoria's nursing department, where the researcher was employed. The trusting relationship built by the researcher created an opportunity for the cop members to have easy access to the traditional leaders, THPs and community members as indigenous knowledge holders within Vhembe district.

3.7.2 Interview process

During the initial visit to Vhembe district, the researcher conducted a group discussion with THPs on the management of *rigoni* through indigenous knowledge. The discussion was facilitated by the researcher and the chairperson of MTHPA for control purposes, as it was an open discussion. There were some distractions amongst the participants, such as background noise, mobile phones ringing, and grandchildren crying, and noise from the general pupils attending the 'finishing school' in the same hall occupied by the researcher and the participants. Some of the THPs attempted to dominate the discussion, blocking others from sharing their ideas about *rigoni* and its management.

The interview and discussion were conducted in Tshivenda and Xitsonga, depending on the needs of the THPs. The researcher had to shift from group discussion to individual, face-to-face, in-depth interviews. This conversion was discussed with the participants for their opinion and it was agreed that at the next meeting, one person would be interviewed separately from the others. Individual interviews averted dominance and embarrassment over contrasting knowledge of management of *rigoni* and ensured thick description of the concepts.

3.7.3 Recording of interview

The researcher asked for permission to record the interview. The participants gave informed consent verbally and signed the informed consent form as proof that permission had been granted to the researcher for the recording of the interview. This request was important because THPs believe that their ancestors do not approve of some biomedicine activities during the performance of the African rituals. The chairperson and other young THPs assisted those who could not write or read with the signing of informed consent. The researcher made notes for non-verbal cues, such as nodding or shaking of heads, facial expressions that indicated approval or disapproval of what was said and wrote field notes that assisted in data analysis.

3.8 Positionality (participants and researcher)

The participants of this study were THPs and IKHs who belong to the MTHPA in Makhado municipality, Vhembe district of Limpopo Province (South Africa). Traditional health practitioners perform functions, activities, processes or services based on a traditional philosophy. This philosophy includes the utilisation of traditional medicine or herbs to treat and manage indigenous illnesses such as *rigoni*. The study included the THPs and IKHs who knew and understood the meaning of *rigoni,* treated and managed *rigoni* through their indigenous knowledge, irrespective of the type of practice or specialisation. All the THPs and IKHs who participated in this study were females young and old, where the oldest was above 90 years old.

The researcher is trained in biomedicine as a professional nurse, but was indigenously socialised within the indigenous Vhembe district in Limpopo Province. Semenya and Potgieter (2014:2) report that traditional practice in Limpopo Province remains the mainstay of the local communities. The researcher chose the indigenous knowledge of THPs and IKHs in the management of *rigoni* as the focus of this doctoral study because of his cultural socialisation. The researcher had observed infants under the age of 12 months die in biomedical practice from “unknown causes” and ill-defined illness, while similar presenting signs and symptoms were managed indigenously and successfully by THPs and IKHs within indigenous communities that used traditional herbs.

Infants whose mothers refused to take them for THPs and IKHs consultation, management and healing for undiagnosed or ill-defined illnesses in Western medical practices (Santos et.al 2008:454) were claimed not survive due to misdiagnosis. A Stats SA (2014:48) report indicates that infant mortality was at 12.9% from ill-defined illnesses in biomedicine in 2011, which might have included *rigoni.*

The researcher is an emerging scholar who has developed interest in the indigenous management of infant illness by THPs to combat infant mortality. Disregard by biomedical practices and healthcare professionals of THPs’ indigenous knowledge of the management of some infant illnesses and related STIs exists. This disregard produces the difficulty of reducing the infant mortality rate from ‘unknown’ causes in Western medicine. This issue stirred the researcher, who respects the services provided by THPs in the management of infant illness, to explore, describe, document and develop a substantive theory on indigenous knowledge of THPs and IKHs in the management of *rigoni.*

3.9 Inclusion and exclusion criteria

The study required the researcher to develop personal relationships with participants – the THPs who came from Vhembe district, Makhado municipality. In this study the researcher gave due regard to the ethical aspects of the study – the veracity, justice, respect and beneficence of the study. The THPs had to be able to speak any of the languages dominant in Limpopo Province. These languages are Tshivenda, Xitsonga and English. The researcher is fluent in all three languages. The THPs had to be experienced in the management of infant illness *rigoni*, irrespective of the type of traditional practice, and had to give verbal and written informed consent. Male THPs were excluded from participation as they were not experienced in treating *rigoni*, as a result of cultural beliefs and respect for female reproductive matters.

3.10 DATA ANALYSIS PROCESS

Corbin and Strauss's (2008:100) approach to analysis presents an initial analysis of data, which was not well structured. The researcher followed open or initial coding to examine the translated, transcribed text and listened to the digital recorder on which the narrations of the THPs and IKHs were interviewed. To ensure accuracy of the transcriptions, interview audiotapes were repeatedly played while the transcribed interviews assisted the researcher to become fully immersed in the data. The translation and the transcripts were handed to the supervisor to assist with some indigenous Venda concepts. Memo writing and comparative analysis were utilised throughout the study and also assisted the process of open- or initial-, focused- and a theoretical coding, as suggested by Charmaz (2014:124). The interviews were first analysed and coded independently and then compared with other interviews that followed with the THPs and IKHs.

3.10.1 Memo writing

Charmaz (2014:162) explains memo writing as the fundamental intermediary phase between data collection and report writing. Memo writing in GT is an essential method as it encourages the researcher to analyse data and codes early during the research process (Charmaz 2014:162). Usually memos contain the products of analysis (Corbin & Strauss 2008:118). Corbin and Strauss further portray that the writing of memos begins at the beginning of the study and continues until the completion of the study. Memos are kept as field notes and ideas to oneself and they provide a means of documenting thinking related to the codes. The emergent categories, and the interaction of the categories as the study continued. In the current study the thoughts of the researcher were recorded in a notebook when they occurred and took the form of hand written categories as the ideas surfaced (Charmaz 2014:162).

The memos were useful in allowing the researcher to identify hints to follow through theoretical sampling (Charmaz 2014:168, Corbin & Strauss 2008:144). Memo writing guides the researcher to

stop and pay attention in order to separate codes and data apart. A comparison is made to define the link and meaning between codes and data. Charmaz (2014:181) further indicates that memos may be free flowing, encouraging the researcher to write freely regarding the analysis that is being undertaken, creating the path for theory construction. The researcher followed this approach of Charmaz (2014) because Corbin and Strauss (2008:120) approach to memoing is much more procedural and rather restrictive.

3.10.2 Constant comparative method

Charmaz (2014:132) states that coding in GT uses constant comparative methods to establish analytic distinction by making comparisons throughout the analytic process. Strauss and Corbin (2008:195) maintain that comparative data analysis is an essential feature of the GT methodology. The researcher in this study used, throughout the analytic process, a constant comparative method to compare initial collected data with the next phase of collected data to identify the similarities and differences in order to facilitate the development of key concepts (Charmaz 2014:132). Constant comparison was used by the researcher to develop concepts from the data by coding and analysing simultaneously (Kolb 2012:83). Constant comparative analysis assisted in grouping codes that developed into categories, which formed (Charmaz 2014:133) participants' indigenous knowledge in the management of *rigoni.*

Through the use of constant comparative analysis data some repeated patterns were developed, thus becoming relevant and fitting data together as components of the theory. This method involved comparing narrated data applicable to each category, integrating the categories and their properties, delimiting the theory and the writing up of the theory (Kolb 2012:83). Abductive reasoning was employed in this process to bring creativity into the inquiry and understanding of the fit between a particular phenomenon and the THPs' / IKHs' practices. Abductive reasoning is an imaginative reasoning employed by the researcher when he could not account for surprising or puzzling outcomes from theoretically based questions, which led to theoretical sampling (Charmaz 2014:200, Corbin & Strauss 2008:197). Both the inductive and deductive strategies were involved because the GT approach simultaneously validates theory through the constant comparative method (Cho & Lee 2014:4). Inductive reasoning focuses on the generation of new theory emerging from data.

3.10.3 Open / initial coding

Open coding is the analytic process through which labels are assigned to data for the purpose of identifying conceptual categories, their properties and dimensions (Charmaz 2014:116; Corbin & Strauss 2008:195). Initial coding stayed close to the data, remained open (Charmaz 2014:120) and, where possible, *in vivo* codes were used. *In vivo* codes are codes extracted directly from the participants' discourse in their everyday language of practice of the phenomenon (Charmaz 2014:134) as recommended by grounded theorists. Initial coding was used, as transcripts were repeatedly read while the digital recording of the interviews by the researcher were listened to. The fractured data into sections for closer analysis and, subsequently, the assignment of a code (Charmaz 2014:125; Corbin & Strauss 2008:198). These codes either consisted of a participant's actual words (*in vivo* code); for example, *n'wana u ya shela,* or other words that reflected understanding of the data. Other words, such as *Rigoni acts like the goni bird* (the hawk bird), also reflected understanding of the data. Therefore, in the initial coding the labels were generally descriptive with some being the actual words used by the participants (THPs and IKHs).

Open coding was done in a line-by-line manner as a prerequisite in GT (Charmaz 2014:134; Corbin & Strauss 2008:198). The line-by-line coding allowed the researcher to focus on each piece of substantive data (Charmaz 2014:134) and to name the codes that were emerging from the original data. The codes identified were noted on the column (extracted section of annexure G) of each interview transcript of THPs and saved (an example is Table 4.1 of Chapter 4).

Subsequent interview visits were done to explore and clarify the properties of the categories as they emerged from the initial and the second interview visit, resulting in a focused data collection. Preliminary codes compiled for each visit were read to identify words and / or phrases that occurred repeatedly. Codes that were similar in nature were grouped together to form a category (Corbin & Strauss 2008:160). The terminology assigned to the preliminary categories was based on the researcher's conceptual interpretation and understanding of the data, as well as the THPs' and IKHs' subjective understanding of the meaning of *rigoni* and its management through their (THPs) indigenous knowledge. The grouping of the codes into categories significantly helped in reducing the amount of data for manageability.

The categories were used to screen through the data in order to develop the features of the emerging themes (Corbin & Strauss 2008:160) to achieve theoretical sampling, as a sampling characteristic of the GT method. Theoretical sampling was aimed at collecting data that might have addressed gaps relating to the development of themes and their features and / or characteristics (Charmaz, 2014:193). Theoretical sampling was achieved through additional interviews with the specialist THPs in *rigoni* management, indigenous knowledge holders and related literature review. Probing was

done more on the subsequent interview visits with the individual participants to clarify on subcategories and categories that were emerging from the previous interview visits and data analysis.

The next coding phase was more abstract than open coding and was known as “focused coding” or “selective coding” (Charmaz 2014:138). Focused codes were applied to several paragraphs in a transcript and required the researcher to choose the most powerful codes to represent the participants’ voice. Using open codes as a starting point, the process of focused coding helped to verify the adequacy of the initial concepts developed.

3.10.4 Focused coding

Charmaz (2014:138) defines focused coding as the use of most significant and / or frequent earlier codes to sift, sort, synthesise and analyse through large amounts of raw data by initial coding. Focused codes advanced the theoretical direction of the study and are more conceptual than many initial word-by-word, line-by-line and incident-with-incident coding (Charmaz 2014:138). Focused coding was used to capture, synthesise and understand the categories of the larger segment of data.

The code *de-worming of worms* was selected to capture, synthesise and understand the category in the following excerpt:
There are worms of rigoni, which I remove from the mother. I burn the removed worms, mixed with herbs and then apply on the excised area of the mother… (THP4).
There are worms that move around the vaginal wall from the uterus. Ndi nga zwo miya nwana a tshi pfha u thothonya nga hafha fhasi. … nowa ivha I na zwipundu (the snake refers to the womb / uterus have pimples) (THP4’s trainee).

The researcher ensured that the assigned codes remained close to the *in vivo* data to allow constant comparison of the indigenous naming of the illness and the indigenous management of the illness by THPs through their indigenous African knowledge. Coding, in accordance with the framework of GT, is an emergent process and the development of the code *de-worming of worms* subsequently gave direction to other codes, allowing the researcher to identify how the different THPs indigenously understood and managed *rigoni*. The comparison was done between those THPs who excise worms and those who use only herbal padding for the management of *rigoni* in both the mother and the infant.

3.10.5 Theoretical coding

Theoretical coding is the identification and integration of central categories. It is a process used to identify the relationships between codes and categories by choosing the central category, which has the potential of resulting in a theory (Charmaz 2014:150). Theoretical coding involves the identification of the central category of the study from which the substantive theory emerges (Corbin & Strauss 2008:104). The central category is the category that has the greatest potential for attracting and linking all other categories together. The central category identified in this study was labelled "indigenous knowledge healing of *rigoni*", with meaning of *rigoni*, origin of illness, infant as victim, indigenous system assessment, indigenous diagnosis and indigenous healing of *rigoni* constituting the categories that were related directly to and integrated with the central category.

The central category appeared to have been mentioned in all the interviews with the THPs and IKHs of the study. There was a logical and consistent explanation between the ethno-cultural naming of the illness *rigoni*, origin of illness, infant as victim, indigenous system assessment, indigenous diagnosis and indigenous healing as the categories of central category.

The central category has the ability to explain theoretically what the whole study entails. The theory was then refined through extended theoretical sampling and data analysis to reach theoretical saturation (Charmaz 2014:214). Theoretical coding continued until the saturation of categories, theoretical categories, was achieved (Charmaz 2014:213). Categories are said to be saturated when the gathering of new data triggers no new theoretical insights or new properties of the theoretical categories. Table 4.3 in Chapter 4 display the categories and subcategories that emerged during the analysis of data. These results have been discussed explicitly in relation to the relevant literature in Chapter 5.

3.11 TRUSTWORTHINESS

Trustworthiness ensures the credibility of the findings in a study in relation to the application and appropriateness of the methods used and the methods' integrity (Noble & Smith 2015:34). The design and methods used are guided by standards and rules to ensure the validity of the findings. Trustworthiness traditionally embraces the following strategies: credibility, transferability, dependability and confirmability (Lincoln & Guba 1985:290). In this study trustworthiness was ensured through verification strategies as described by Morse et al. (2002:13) to ensure validity and reliability: methodological coherence, theoretical sampling, concurrent data, collection and analysis, theoretical thinking and theoretical development (Table 3.1).

3.11.1 Methodological coherence

Methodological coherence is the degree to which various elements of the methodology fit together within the framework provided for the study (Chenail et al 2009:33). The researcher ensured congruence between the research objectives, research questions and data collection and analysis methods. The appropriate sample was used, as all THPs were specialists in the phenomenon under study, until data saturation was reached (Morse et al 2004:13).

Prolonged engagement, concurrent collection and analysis and triangulation were used in the study. The participants were contacted on a monthly basis, either face to face or by telephone during the writing of the report for clarification of some concepts and for in-depth probing. The questions that were posed to the participants were aligned to the research purpose and objectives of the study. During data collection, analysis was done simultaneously, allowing the researcher to probe more into certain points. The concepts were broken into pieces until nothing more emerged from the participants to clarify the meaning and the indigenous management of *rigoni*.

3.11.2 Theoretical sampling and sampling adequacy

Sampling adequacy was reached through theoretical saturation and replication (Morse 2004:14) of adequate data that accounted for all aspects of the management of *rigoni* through the indigenous knowledge of THPs. Theoretical sampling is the process of data collection, where new goals for data collection were focused by the outcome from the previous participants The aim of theoretical sampling was to methodically choose participants and / or data that would guide the researcher to select data samples that were most relevant for the study. Theoretical sampling was achieved by selecting successive participants based on the information that emerged from the data that was already coded (Jones & Alony 2011:106). Some new data was recognised and unrecognised to ensure that the emerging theory developed consistently.

The researcher conducted follow-up in-depth interviews with the THPs who were knowledgeable on the phenomenon, available and ready to elaborate until saturation of data was reached.

3.11.3 Collecting and analysing data concurrently

In this study the interaction was between what the THPs knew and what the researcher needed to know; that is, the meaning of *rigoni* and its indigenous management through indigenous knowledge of THPs. The matching and the iterative interaction between empirical data and analysis were aimed at attaining trustworthiness of the study (Morse et al 2004:15). The participants in this study were using vernacular during data collection. The researcher had to use an audio recorder to capture the whole narration of the phenomena, while taking field notes for observable behaviour and noting concepts that needed probing. Immediately after the interviews with the participants, the researcher

had to listen to the recorder for translation and transcription while still with a fresh memory of the scene. During this process the researcher analysed the data concurrently, as required in GT.

3.11.4 Thinking theoretically / researcher responsiveness

Concepts emerging from empirical data were reconfirmed in new data, resulting in new concepts that were verified in already collected data. Line-by-line coding was done, as well as checking and rechecking to build the solid foundation of the emergent substantive theory (Morse et al 2004:15). The researcher described the findings with some direct quotations from the THPs to reflect their voices, without changing the essence of the meaning.

3.11.5 Theoretical development / saturation

The researcher moved deliberately between initial analysis of data and the subsequent theoretical understanding from the literature to incorporate the data. In this study, theory was generated as an outcome of the research process from concept analysis discussed in Chapter 6 of this study.

Table 3.1 Verification strategies

Verification strategy	Meaning	Application	Sources
Methodological coherence	Ensuring that all the research processes arise from same foundation and fit together in the study	The questions matched the methods, and data collection and analysis matched as the process was iterative. Research questions were modified to be understood by the participants, without losing the focus of the study.	Davis (2012:131)
Theoretical sampling	Data collection method which relies on data themes / concepts collected from participants who will maximize the development of concepts	Only THPs who manage and treat *rigoni* were the only participants in the study. Theoretical sampling occurred to saturate the categories, which were replicating during the analysis.	Corbin and Strauss (2008:143) Morse (2002:12)
Concurrent Data Collection and Analysis	Mutual interaction between what is known (collected data) and what need to be known (analysis).	Constant comparison of data, moving back and forth in the data.	Morse (2002:12)
Theoretical Thinking	It is a way of explaining and describing two or more concepts that will prescribe for the practice setting.	Ideas which emerged from data were confirmed with new data, and reconfirmed with existing data of the study. A macro and micro perspective on line by line analysis was done during open coding. Constant checking and rechecking of codes and concepts assisted to build the foundation of the theory.	Jenkins & Thomas (2005:117) Morse (2002:13)
Theoretical development	Linking and refining the themes to create a theory deliberately.	Developed as an outcome of the research process.	Corbin and Strauss (2008:143) Morse (2002:13)

3.12 SUMMARY

Chapter 3 explained the research design and methodology of the study. Clarification was given on the GTM as well as the lens of indigeneity. The coding process as described by Charmaz (2014) was discussed, followed by a description of how trustworthiness was ensured.

CHAPTER 4: DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter presents the initial data analysis of results that will enable the reader to follow the processes that were followed in the development of substantive theory. The overall aim was to develop a substantive theory that explains and describes childhood illnesses that are categorised by THPs and IKHs but not documented. These illnesses are unknown in conventional medicine. Data collection and analysis in this study occurred concurrently as required in the GT process. The initial open coding started immediately after the data from the initial interview had been collected.

4.2 DATA ANALYSIS

In this study data was analysed following Charmaz's (2014:116) stages of open / initial coding, focused coding and theoretical coding to allow for flexibility to foster what was revealed in the data in order to make follow up (Charmaz 2014:26). Charmaz's (2014:220) explanation of the procedures of data analysis provided valuable direction for the researcher during the analysis so that the researcher could follow initial or line-by-line, focused and theoretical coding. Initial coding is the first process of engaging with data and defining it so as to create a link between the collection of data and the development of the emerging theory from the data (Charmaz 2014:343). "Focused coding" refers to the use of the most important and frequent earlier codes to sift through and analyse the quantity of data comprehensively (Charmaz 2014:138). The THPs' and IKHs' information on the indigenous management of *rigoni* was integrated within the three coding stages and through the constant comparative method to integrate the process (Charmaz 2014:140).

Grounded theory methodology advocates the use of several coding techniques to examine participants' accounts at different levels. Initial coding (Charmaz, 2014:116) provided a good starting point to identify initial phenomena and produced a list of categories important for the participants. The researcher coded data from the interview data transcripts in a line-by-line fashion, to learn how

THPs and IKHs made sense of the indigenous meaning and management of rigoni. Conceptual labels were assigned to every line in the interview transcript to capture what had been said by the THPs and IKHs. Codes were allocated to participants' words and statements to develop concepts that constituted the start of the analytic process. Coding was done from the transcripts of the participants, in which some indigenous terms were quoted as such in the study to form sub-categories (Charmaz 2014:133). The concepts were highlighted in black and underlined in the transcripts. Table 4.1 presents an example of the transcripts and the codes for the interview.

Table 4.1: Example of coded transcript from one traditional health practitioner

TRANSCRIPTS	CODES
THP2s: Some say it is gokhonya, some say it is *rigoni.* It is more related, but people explain it differently. When we come to *gokhonya,* the name *gokhonya, gokhonya* means that during the birth of the infant, *gokhonya,* the illness, ***gokhonya nwana* (knocks the infant).**	***gokhonya nwana* (knocks the infant).**
THP2s: Yes, but this **illness knocks the infant** when he / she **passes through the birth canal**, and the infant passes with the illness. That is why it is called **gokhonya in Tshivenda**. Our Venda is not the same. But us this illness of gokhonya, we call it *goni*. This *goni*, the name *goni*, if you look carefully it is *goni*. This ***goni*, if it passes where there are chickens it will pick the chicken**. So it is this illness.	**illness knocks the infant** **birth canal** **gokhonya in Tshivenda** ***goni*** ***pick chickens***
THP2s: The **hen is me the mother**, the **chicken is my child**. *Goni* is there! It will pass and doba n'wananga. ***Nndi goni***. Those who call it gokhonya is another way of calling it because it **completes the meaning, it knocks the infant**, because it does not hit everywhere, **but on (*kha chitiko*) the occiput**.	**mother hen, Chick is child** ***Nndi goni (it is goni)***. **Completes the meaning, knocks the infant** **(*kha chitiko)* the occiput**
THP2s: Yes it hits on **the occiput of the infant**.	**occiput of the infant**
THP2s: Ok! This *goni* does two things on infants. To some it **knocks on the occiput**. There will be **reddish marks all over the occiput**. O ***tsukuluwa-tsukuluwa.*** To some infant it is not on the occiput. When you carry the infant on your arms, the infant changes, ***a tsukuluwa* on areas you touched**, showing redness. This means that the illness is hidden.	**Knocks on the occiput** **reddish marks / *tsukuluwa-tsukuluwa*** ***Tsukuluwa* (reddish) on areas touched**
THP2s: that means it is the one which **kills infants because it is invisible (*a li vhonali*)**, but it is still that *goni.*	**kills infants** **It is invisible**
THP2s: Ok. What I do I will say, but this infant's *goni* is not clear. So I cannot leave the infant alone, ***nndi ya n'wi elela***, because it might have **knock the infant internally** because it is not visible outside.	***N'wi elela (act as prophylaxis)*** **knock the infant internally**
THP2s: *U elelela* is to take the infant and ***aravhedza nga mishonga, and incision*** made to apply mishonga. THP2s: Oh right! That is very good. Long time ago when we treat *goni* on people like myself, I **use *mishonga* dug from the bush**. That is herbs from the bush. I **incise the infant and apply the herbs**, **smoke inhalation, grind the herbs and incise for application of the herbs.** I take some traditional herbs to give to the mother of the infant. This traditional herbs should be placed on the infant vest, the clothes of an infant, fold the vest and the mother instructed to *ambarela* when she sleeps. **U *ambarela*** is to insert the folded herbs in the vest into the mother (maternal vagina introitus).	***Aravhedza nga mishonga (smoke inhalation with herbs), and incision*** **Use *mishonga* dug from the bush** **Incise infant and apply herb** ***U ambarela (insert herbs wrapped with cloth into vagina)***

The process of line-by-line coding helped to open up the text for interpreting the transcript in new and unfamiliar ways, which also tested the researcher's assumptions about the phenomenon. Corbin and Strauss (2008:196) suggest that the use of initial or 'sensitising questions', helps the researcher to grasp what the data might be indicating. Suggested questions were: "What is the THPs / IKHs understanding of the meaning of *rigoni*? How do they (THPs / IKHs) indigenously treat and manage *rigoni?*''

During the line-by-line data analysis descriptive codes started to emerge, indicating the indigenous, cultural African beliefs and practices of THPs and IKHs. The codes were then compared based on their similarities and grouped together to form categories. The names of the categories resulted from interpretation of the data.

4.2.1 Focused coding

Focused coding is more directed, selective and conceptual than the initial coding process. The categories that appeared more frequently were used to select through the data in order to develop the properties of the emerging categories. Several subcategories were identified under categories to specify the processes for the phenomenon under study (Charmaz 2014:140).

During focused coding, interviews, narrated stories and observations were analysed and compared with the THPs and IKHs, their actions and interpretations of what was being revealed in the data. For example, for the code 'meaning' of *rigoni,* the researcher looked at data to determine how each participant (THP / IKH) understood the meaning of *rigoni*. Each participant's explanation of their understanding was compared for the refinement of the meaning of *rigoni*. Participants' understanding of the meaning of *rigoni* was based on ethnicity, cultural beliefs, and the action of the illness and the presenting symptoms of the illness. The researcher had to develop the initial code "meaning of *rigoni*" into a category (Table 4.3). A category is a theme that explains the understanding of what participants said. A category may be interpreted in the light of the situation and interviews, as well as the emerging theory. Categories explicate ideas, events, or processes in the data using telling words (Charmaz 2014:189). The early categories were considered tentative because it was important to remain open to further analytic scrutiny.

Table 4.2: Example of transcript from one traditional health practitioner: Initial and focused coding

TRANSCRIPTS	INITIAL CODING	FOCUSED CODING
THP2s: Some say it is gokhonya, some say it is *rigoni.* It is more related, but people explain it differently. When we come to *gokhonya,* the name *gokhonya, gokhonya* means that during the birth of the infant, *gokhonya,* the illness, ***gokhonya nwana* (knocks the infant).** THP2s: Yes, but this **illness knocks the infant** when he / she **passes through the birth canal**, and the infant passes with the illness. That is why it is called ***gokhonya* in Tshivenda**. Our Venda is not the same. But us this illness of gokhonya, we call it *goni*. This *goni*, the name *goni*, if you look carefully it is *goni*. This ***goni*, if it passes where there are chickens it will pick the chicken**. So it is this illness.	***Gokhonya nwana* (knocks the infant).** **illness knocks the infant** **Birth canal** ***gokhonya* in Tshivenda** ***goni*** ***picks chickens***	***Meaning of rigoni***
THP2s: The **hen is me the mother**, the **chicken is my child**. *Goni* is there! It will pass and *doba n'wananga*. ***Nndi goni***. Those who call it *gokhonya* is another way of calling it because it **completes the meaning, it knocks the infant**, because it does not hit everywhere, **but on (*kha chitiko*) the occiput**. THP2s: Yes it hits on **the occiput of the infant**. THP2s: Ok! This *goni* does two things on infants. To some it **knocks on the occiput**. There will be **reddish marks all over the occiput**. O ***tsukuluwa-***	**mother hen - Chick is child** ***Nndi goni (It is goni)*.** **Completes the meaning,** **Knocks the infant** ***(Kha chitiko)* the occiput** **occiput of the infant**	***Mother hen***
tsukuluwa. To some infant it is not on the occiput. When you carry the infant on your arms, the infant changes, ***a tsukuluwa* on areas you touched**, showing redness. This means that the illness is hidden. THP2s: that means it is the one which **kills infants because it is invisible (*a li vhonali*)**, but it is still that *goni.*	**Knocks on the occiput** **Reddish marks / *tsukuluwa-tsukuluwa*** ***Tsukuluwa* (Reddish) on areas you touched**	***Signs and symptoms***
THP2s: Ok. What I do I will say, but this infant's *goni* is not clear. So I cannot leave the infant alone, ***nndi ya n'wi elela***, because it might have **knock the infant internally** because it is not visible outside.	**kills infants** **it is invisible** ***n'wi elela (*act as prophylaxis*)*** **knock the infant internally**	***Action of rigoni***

4.2.2 Theoretical sampling

Charmaz's (2014:193) theoretical sampling refers to a type of GT sampling technique in which the researcher aims to develop properties of the developing categories or theory. Theoretical sampling represents a type of sampling characteristic of the GT method. The aim of theoretical sampling is to collect data that will address any gaps pertaining to the development of categories and their properties until no new properties emerge (Charmaz 2014:193). Theoretical sampling covers consulting more sources of information by conducting additional interviews and related literature. Additional interviews were conducted for probing towards the end of each interview to further scrutinise and clarify concepts that emerged from data that had been just collected.

Theoretical sampling of relevant literature followed after the development of categories. The integration of the literature was used to provide supporting data for the emergence of substantive theory. For this study, theoretical sampling kept data collection to a minimum to ensure that data collection focus was aimed at saturating the categories and their properties. Theoretical sampling continued until no new categories emerged; that is, theoretical saturation had been reached. According to Charmaz (2014:213), theoretical saturation refers to the point at which gathering more data about a theoretical category reveals no new properties about the emerging GT. Theoretical saturation of the categories in this study occurred after the tenth (10th) individual interviews, but the researcher kept in contact with THPs and IKHs during data analysis to verify and clarify the meaning of some indigenous words.

The coding of the data and the subsequent constant comparison of the data between interviews continued until the following seven categories emerged: meaning of *rigoni*, origins of *rigoni,* infant as victim, indigenous system assessment, indigenous diagnosis and indigenous healing process of *rigoni* and risks of untreated *rigoni* (Table 4.3).

Table 4.3 Data analysis: Categories and sub-categories

CATEGORIES	SUB-CATEGORY(IES)
1. Meaning of *rigoni*	**1.1 Ethno-cultural naming of illness** **1.2 Action of *rigoni*** **1.3 Presenting signs & symptoms**
2. Origins of *rigoni*	**2.1 Infant protection** 2.1.1 *U tolwa ha muselwa (*examination of the mother***)*** 2.1.2 Natural incubation and brooding 2.1.3 Hatching / brooding and rearing
3. Infant as victim	**3.1. Father as the agent** **3.2 Mother as host.**
4. Indigenous system assessment	**4.1 Assessment by family member (primary assessment)** 4.1.1. Incessant crying 4.1.2. Identification of red marks/discoloration of occipital and neck region 4.1.3. Suspicion of *rigoni* 4.1.4. Seeking assistance from THPs/IKHs **4.2. Assessment by THPs/IKHs (secondary assessment)** 4.2.1. Physical assessment and observation 4.2.2. History-taking from mother 4.2.3. Traditional bone throwing 4.2.4. Spiritual divination
5. Indigenous diagnosis	**5.1 Confirmation of infant illness *rigoni***
6. Indigenous healing process of *rigoni*	**6.1 Maternal healing** 6.1.1. Deworming 6.1.2. Herbal vaginal padding 6.1.3. Herbal bath **6.2 Infant healing** 6.2.1 Incision of affected area 6.2.2 *U arhavhela* (Smoke inhalation) 6.2.3 Topical herbal mixture application 6.2.4 Ingestion of herbal mixture 6.2.5 Wrist and waist amulet 6.2.6 Infant worming
7. Risks of untreated *rigoni*	**7.1 Maternal risks** 7.1.1 Repeated and undiagnosed abortion **7.2 Infant risks** 7.2.1 Mortality

4.3 CATEGORIES AND SUB-CATEGORIES

The researcher was immersed in the raw data through intense analysis. The researcher initially analysed the data as the first step of open coding in GT. This analysis helped the researcher to merge categories and sub-categories during the open coding of the data. The sub-categories were further condensed into categories as guided by the predetermined concepts from the objectives and questions of the study. The categories that emerged were: meaning of *rigoni,* origins of *rigoni*, infant as victim, indigenous system assessment, indigenous diagnosis, indigenous healing of *rigoni* and risks of *rigoni.* The discussion of sub-categories and categories follows below:

Category 1: Meaning of *rigoni*

The meaning of *rigoni* (the hawk bird) emerged as one of the categories. When the participants (THPs and IKHs) were asked to explain their indigenous understanding of *rigoni* they explained the story in relation to the action of the illness, the causes as well as signs and symptoms. During the in-depth probing to understand the clear meaning of *rigoni*, the participants indicated that the name *rigoni* originates from the goni, which is the hawk bird. The bird hunts its prey by flying around, circling high above the ground, and stooping sharply to catch its prey by surprise. This is a phenomenon that the hawk is known for in the community when it catches village chickens that are known as its favourite prey. Other THPs related the meaning of *rigoni* to the action of the illness, that is, *gokhonya* (literally meaning to knock in Tshivenda), as well as the signs and symptoms such as *u tsukuluwa* (redness), localised fever, retracted neck, etc. (details are discussed below). Based on the information above, the categories that emanated from the meaning of *rigoni* were the ethno-cultural naming of illness, action of illness and signs that identify the disease.

Ethno-cultural naming of illness

In African tradition, illnesses like other phenomena are named according to people's ethnicity, cultural beliefs and their indigenous socialisation. The naming in general is guided by the knowledge from elders and ancestors. Various cultures use words and phrases to identify and name indigenous illnesses (Awah, Unwin & Phillimore 2009:4). Traditional health practitioners who were part of this study explained the history of the naming of *rigoni* as follows:

THP1 explained: *Rigoni is named according to different regions and languages. In our region "rigoni" is a Tsonga word for the bird referred as the hawk. This is the natural bird, common in woodlands of sub-Saharan Africa that targets chicks as its prey.*

THPs and IKHs explained further by adding that the naming referred to the character of a hawk when it attacks its prey for food. IKH2 said:

Yes indeed the hawk is viewed as a thief who uses its paws to catch its prey. It does not come fast, it circles around its prey until it finds its chance to snatch. Immediately after snatching its prey, the eagle flies far away for its own safety and finalises the killing of the prey.

THP 3 echoed what had already been said by others:

The same connotation is used by us in Tshivenda, we call it "goni", which also refers to a hawk. It is called "rigoni" because it acts like the goni bird [hawk bird], which catches chickens and kills because the goni bird is the attacker.

The words "*rigoni*" and "*goni*" were used interchangeably, as the participants were from the VhaVenda and VaTsonga ethnic groups.

Action of *rigoni*

Participants introduced a different view of naming when they indicated that they were also the Vhavenda. However, in their area the naming was done based on the action of the hawk. The illness is referred to as "*gokhonya*" [knocking].

IKH 3 explained:

During birth rigoni knocks the infant hard on the occiput, neck or part of the head and other areas of the body. When the infant has been knocked by the illness, the mother may not notice, especially those giving birth for the first time that is why in our indigenous cultural young women should deliver the baby in the presence of an elderly experienced woman assigned by the family to look after her.

The mother is unaware that there is a fatal sickness, especially inexperienced mothers who do not believe in indigenous traditional and cultural practices. Just like the hawk bird attacking the innocent chickens, the *rigoni* illness is carried by the pregnant women.

THP 2 described it as follows:

The disease is harboured in their vaginal canal in a form of warts and surprisingly and aggressively knocks or hits the innocent infant hard while in utero and / or when the baby is born during vaginal birth.

Signs that identify the disease or illness

Some of the ethnic groups name the disease based on the sign that identifies the disease. THP1 explained that during her time as a domestic worker in Johannesburg, there were many people of different ethnic groups (Zulus, Tswana, Pedi, Tsonga, Xhosa, and others) that she interacted with and helped to treat their rigoni and its signs. THP1 commented as follows:

This is very complicated. I stayed and worked in Johannesburg and worked with traditional health practitioners from other cultures. I know that the Basotho also refer to it as "Lekone" [the hawk], which is similar to "rigoni" and "goni". However, the Zulus refer to it based on the effect of the knocking and call it "Ibala" [discolouration].

The THPs and IKHs deliberated on the naming of *rigoni* based on the effect that the illness has on the infant's body, such as discolouration. As the discoloration occurs anywhere on the body the researcher asked the participants to explain how they know that the infant suffers from rigoni. THPs and IKHs' several responses in this case yielded the following codes:

Identification of redness

Indigenously and culturally it is believed that the infant with *rigoni* will be born with a red mark on the occiput, neck, and some parts of the armpits. This was heard from THPs 4, 5 and IKH 7, who commented that infants born with red marks on their body parts are easily identifiable immediately after birth. THP4 stated:

I assess the baby and I will identify some redness behind the neck. Sometimes the baby with try to rub the occiput and the neck by shaking the head. When I carefully check the back of the baby I will notice some red marks, as if they are red dots. I will put the back of my hand on the occiput and will feel hotness.

THP5 added:

Goni is in Tshivenda and Tshitshangana [Xitsonga] languages. There is redness on the neck of the infant and itchiness on the occiput. There is redness immediately from birth.

THP7 concurred with the other THPs by stating that she makes the incisions for topical application of herbal medicines on the reddened area only, on the joints and sometimes on the anterior fontanel. The retired paediatric professional nurse (RPPN) shared the same sentiments by stating:

While I was still the paediatric matron at the hospital mother mentioned to me that the infant suffers from rigoni. I checked the infant from my cultural background, not as the professional nurse which is Western trained. I noted the red marks and the infant was feverish. The mothers declared that their indigenous grandmother believed that the infant suffered from rigoni as evidenced by the redness on the neck and occiput.

The participants narrated the presenting signs and symptoms based on the red birth mark, which is identified on the infant's neck, occiput and sometimes the armpits.

Incessant crying

Another presenting symptom that makes the caregiver or the mother consult traditional health practitioners is continuous crying, even when the infant has been breastfed. THPs 3, 4, 5 and 6 had this to say:

In rigoni the infant cries non-stop, even if it has been fed enough. The infant end up not taking the feeds, continues to cry. The infant stops crying when asleep due to tiredness, but when he / she wakes up you will regret giving birth to this infant.

THP 4 states: *The child cries the whole night. You check here… [Pointing at the back of the neck] and crying a lot and loss of appetite to suck from the breast, then you know it is goni.*

THP 5 viewed it differently by adding that the cry of the baby may be caused by the pain from the umbilicus: *The infant cries due to the umbilicus which has not yet completely healed and also pain in the stomach. Remember that in biomedicine you promote that the infant must not be fed, so they become hungry and may cry as you said. The child cries the whole night… does not breastfeed*.

The retired paediatric professional nurse emphasised the uncontrollable cry of the infants who are traditionally believed to be suffering from *rigoni.* She shared her personal experience as a nurse from working with mothers and her own baby:

My child cried like nothing …day and night… it was horrible. I tried to breastfeed, but the baby refused. I was frustrated, and mind you it was my first born.

Some of the participants had a different view on the crying of the infant. The participants claimed that sometimes infants cry incessantly because they have been possessed by the ancestors. The practices and rituals involved and interpretations attached to the names vary from society to society and from one culture to another. Indigenous traditional Africans believe that by naming the infants after dead parents or relatives, infants become protected from all evils. It is also culturally believed that the name that has been inherited from the ancestors will enter into the infant at birth and protect this infant throughout his / her life. THP7 narrated:

It is true that the baby with rigoni cries without stopping. It is sometimes mistaken that this cry is due to rigoni meanwhile it is because the baby cries for the name. As indigenous Africans we believe that our parents did not die, but they are always with us. One of the departed persons from the family may decide to revive his or her name within the family through the new baby.

This belief is clearly explained by THP3 and THP8.

Parents confuse the infant's cry that results from rigoni with the cry for the ancestral name or family name.. If you do not take the infant to Vhomaine [THP] who deals with infant illness for

assistance, you lose the infant. The infant continues to cry even if the parents have given him / her the ancestral name and stops breastfeeding.

THP8 echoed that from an indigenous perspective, the cry of the baby is sometimes confused by the parents and the elders as being associated with the ancestors. This participant said:

Some parents and the elderly may think that the infant cries for the family or clan name, while it is not. The baby cries because she is suffering from rigoni and not because of ancestors. The rigoni cry is accompanied by other signs such as discolouration on the neck and occiput, diarrhoea and arms and legs weakness.

In case of the cry for the name the infant may cry uncontrollably during the neonatal stage while simultaneously having other illnesses such as *rigoni.*

Malnutrition accompanied by diarrhoea and weight loss

As the participants were elaborating on the signs and symptoms of rigoni, they indicated the symptoms that are related to feeding of the infant. Among others they highlighted risks such as dehydration, diarrhoea and weight loss in relation to rigoni in infants. THP6 explained these risks as follows:

Nwana u ya shela, ha tsheni na zwone ha takadzi kha tshifhatuwo [the infant passes loose stools, and looks dull and generally inactive]. *The infant looks like is not breastfed. The mother-in-law complaints that the infant is not fed due to the sisters at the clinic. Nwana u to nga ha lisiwi. There is malnutrition, I see mitshinga [blood vessels] and baby is bony.*

THP9 concurred with THP6 by elaborating that infants suffering from *rigoni* present with *u shela* and the child loses *vuleme hawe* [The baby presents with passing of loose stools and weight loss]. This participant said:

According to me this infant illness is called gokhonya kana goni….the infant presents with u shela [Literally refers to passing of loose stools - diarrhoea]. The mother keeps on changing the nappies of the infant due to continuous defaecation of watery stools. Nappies does not stay long because of diarrhoea. I also noticed that these babies with rigoni loss weight and be like a paper, ha na vuleme [no weight]. Lukanda la nwana li a omelwa [dryness of the skin].

THP1 and THP4 emphasised the issue that infants suffering from *rigoni* might present with many symptoms and pose health risks. THP1 commented:

The difference is that the infant will have other symptoms such as diarrhoea, weakness and in hospital you insert drips, but the infant does not become better. If the infant is not taken to the traditional healer on time, the infant dies on hospital bed with their drips. The diarrhoea due to rigoni does not respond to biomedicine at all. That is why we 'lose' infants while they are on drips to add water to the body. [I assume she is referring to the rehydration in modern practice].

THP4 said: *You will see the child losing weight. I can see. I check here… [pointing at the back of the neck] loses appetite to suck from the breast, then I it is goni. The baby is so light like dzimpapa dza khuhu [chicken feathers].*

The retired paediatric professional nurse stated what she had witnessed during her tenure as the paediatric matron where infants with rigoni were admitted.

Mothers of infants with dehydration and malnutrition used to disappear from the ward and return after a day or hours later. I used to talk to these mothers about their infants' condition. The mother explained that they visited the traditional healer for the treatment of rigoni, as there was no improvement in the baby's condition. On their return some of the mothers requested a pass out for a day or two, stating some family problems. Others even refuse to sign the hospital treatment form [RHT] if they are not given the time out. They take their infants to indigenous practitioners for the treatment of rigoni.

The infant who is suffering from diarrhoeal symptoms develops dehydration and may be identified by a sunken fontanel.

Dehydration and sunken anterior fontanel

Dehydration occurs when the infant's body loses too much water due to vomiting and diarrhoea caused by the illness *rigon*i. The infant's dehydration can be classified as mild, moderate or severe. The symptoms of dehydration in an infant include extreme tiredness, restlessness and irritability; dryness of mouth, lips and tongue; dry nappy the whole day; and

infant becomes light, sunken eyes and fontanel and no tears when crying. Here are some of the quotes from THPs1 and 9:

The diarrhoea due to rigoni does not respond to biomedicine at all. That is why we lose infants while they are on drips to add water in the body [I assume she is referring to the rehydration in biomedicine], xinhlokwana xa wela [fontanel sinks] while in drips.

When I look at the infant I will notice that the top of the head has fallen. When the baby cry there is no tears and this indicates to me that the infant has rigoni and must be treated immediately. The infant have sunken head… here! [Pointing to the anterior fontanel area].

One of the participants who had been a professional nurse indicated an important issue about the sunken fontanelle when she stated that:

Infants with dehydration and malnutrition were always admitted in my ward. Their mother(s) use to disappear during feeding and they will return with the granny. I have seen a lot of women deserting their infants to go home for the treatment of rigoni by healers. When they return they [mothers] explain that they have been advised by their elders in the family that the illness which the infant suffer from is rigoni and can only by treated by our African cultural practices.

Other related symptoms

There were other symptoms of rigoni that THPs and IKHs mentioned. These symptoms are discussed below:

Rounded meconium

There are some other symptoms that are also related to *rigoni* that were explained by THPs and IKHs. Some of these symptoms included rounded meconium and obesity. From a biomedical perspective meconium is the dark green substance forming the first faeces of a new-born infant. The meconium of an infant is roundish, dark in colour in an infant suffering from *rigoni*. The passage of meconium in a new-born infant is one of the related symptoms of *rigoni* according to the participants. This was asserted by THP5, THP6 and THP10. THP5 said:

The stools will be slippery and roundish and this means it is rigoni. The stools are rolled due to rigoni in the infant. The stools are black in colour.

Weight gain and obesity

In addition to the passing of the black-coloured stools the participants indicated that an infant with rigoni gains more weight than a healthy infant. This was affirmed by THP6 who said:

The infant with rigoni grows very fast and becomes obese [u va a na muvhili nga manda]. The way the infant grows is amazing. I learned that a baby with one month looks like he is six months old, with big body parts, legs, arms neck and head, but looking very dull.

THP10 stresses that infants who gain weight mislead the understanding of the young parents, who claim that the baby is fresh. Meanwhile, it is rigoni attacking the infant silently:

The infant becomes obese quickly without hotness of the body. You will hear young mother say my baby is fresh. I ate zwiliwa zwa vhudi [nutritious food], *but the infant does not look happy, he cries and inactive. The infant who was hit inside the uterus may be born and looks healthy.*

Fever and weakness

Sometimes infants with *rigoni* present with fever and weakness. The participants shared the following sentiments to support the presenting symptoms of *rigoni.*

THP3 explained: *The infant changes immediately and becomes weak and unable to control the head and may sometimes vomits when fed. The baby loses her strength and vomits when she is breastfed.*

This statement by THP3 was supported by THP10 when she said: *The infant looks weak and fail to maintain eye contact with the mother. The body looks tired all the time with less interest on the surrounding and inactive.*

IKH9 and retired paediatric professional nurse [RPPN] shared the view that the baby with *rigoni* may present with many symptoms, including fever, especially on the affected body part. IKH9 stated:

I must feel hotness on the neck and occiput. When you carry the infant I noted that he cannot control his head, arms and legs like an active infant. I panicked and start crying as a nurse. I was young and thinking about losing my only child at the time.

The RPPN confirmed the baby's fever by stating that all infants who were admitted to the hospital, who were believed to be suffering from *rigoni* by their mothers / caregivers, had fever and diarrhoea. The RPPN said:

Yes, it may be true that infant suffering from this condition experience fever, diarrhoea which lead to dehydration if rehydration is not done immediately to stabilise the baby. Mothers used to bring their babies suffering from diarrhoea, dehydration, loss of weight and poor feeding.

THP5 further explained that some of the infants with *rigoni* presents with 'lazy red eyes': *When the infant is brought to me, I check everything from the head to the toes as the baby must be naked. The baby fails to open the eyes, which looks abnormal as they will be looking on the side instead of looking at me straight. The infant will display the laziness to open the eyes, redness of the eyes, eyes looks squinty and I immediately inspect the mother when I notice these signs.*

In indigenous African cultural practices, poor eye contact, weakness and fever in the infant is associated with infant illnesses, which may be managed and treated indigenously by African cultural methods. Mothers have the responsibility of caring for the infant while in the uterus as well as after birth to ensure that the infant stays healthy and safe from danger and diseases.

Category 2: Origins of *rigoni*

The second category that emerged from this study is the origins of *rigoni,* commonly termed "aetiology" in biomedicine. THPs and IKHs who work with rigoni patients are culturally and indigenously believed to be capable of treating and managing *rigoni* among African mothers and their infants. The illness is culturally believed to be carried by the mother, who does not show any symptoms. Sometimes *rigoni* may be culturally believed to have been caused by the supernatural powers of family ancestors or even evil witches. For this reason the consultation of diviners takes place. The illness is embedded in the uterus and in the vaginal wall of the mother. Traditional health practitioners and indigenous knowledge holders claimed that *rigoni* in men is invisible, though it is located on the lower part of the glans penis and the anal area. The mother does not talk about the illness even if she notices some signs because

of fear of embarrassment in the family. Matters relating to sexuality and reproduction are believed to be a secret of the husband and wife, and the wife should maintain the confidentiality to gain favours from the in-laws.

THP2 has this to say:

Even 'you' men have rigoni. When you 'enter the woman', sit with her in the blankets while you have rigoni, it will affect the infant inside. It is not easy to identify rigoni in men, and men always does not consult us when they are sick, they enjoy secrecy. You find rigoni on the anus of the men, and he feels the irritation, especially when he passes stools.

THP12 alluded:

I wanted to add that rigoni in males is not easily identified. Men are the ones who infected the mother. It is possible for rigoni in males not to be identified. I use my experience to by talking to the mother to invite the husband, but because of cultural respect for men, I utilise my male thwasana [THP in training] to assess the men, especially when they visited due to failure to impregnate the mother.

THP3 said:

Vho-mme [mothers] get rigoni from males. Males sleep around with different partners and contract this illness. When they return home from their work in Johannesburg, they find the mother clean and awaiting faithfully for the husband to engage in intercourse. Men are the ones who spread the illness rigoni. The mother harbours the illness until she falls pregnant – the time when rigoni is transmitted to the foetus while inside the uterus, or transmitted to the infant during normal vaginal birth. It is painful because the infant gets the illness from the mother and becomes the victim of circumstances.

THP6 supported THP3 by stating:

This is not an infant illness, but khotshi na mma [literally referring to the father and mother]. It is not the infant's fault to be sick. Hovhu vulwadze [this illness] *is from nature. Married couple should reproduce, the family expect grandchildren after they have paid lobola. There is no way that the mother can avoid to get the illness rigoni as she is expected to fall pregnant from the husband, who spend months working to provide for the family in Johannesburg.*

THP7 added:

Yes! This is the same as vuvabyi bya tingana [sexual transmitted infections]. You may ask yourself how the infant get sexual transmitted infection, it is not rape, but through vertical transmission during the birth process, the infant get the illness unwillingly. So it is true that the illness comes with you men and infect the mother. Remember that men are traditionally allowed to polygamous, so they have many partners in Johannesburg and other areas where they work. That is where men get the illness and spread it to the wife at home after many months of not having sexual intercourse with the housewife. The day they engage in intercourse is the day the mother contract the illness, which further reaches the unborn infant or knocks the infant during birth.

The findings of this study revealed that the infant may be exposed to *rigoni* during its passage through the birth canal. In a modern healthcare system, the mother should protect the unborn baby from sexually transmitted diseases by undergoing an antenatal examination before pregnancy and attending an antenatal clinic throughout pregnancy. From an indigenous perspective African communities and families utilise THPs and IKHs to take care of the pregnant women until delivery of the infant. The analogy of mother-hen protection emerged as a category from the summation of three sub-categories: *u tolwa ha muselwa* [examination of a bride], natural incubation and brooding and hatching/brooding and rearing. The analogy is intended to clarify how a mother ought to protect the infant from *rigoni* from its being in the uterus onwards.

Infant protection

The mother, as the primary care provider, is culturally and naturally expected to protect the unborn and the born infant from any natural and unnatural harm. The newly married mother is expected to undergo rituals before she is allowed into the husband's arms. The culturally and traditional indigenous Vhavenda and Vatsonga people assign an elderly female to take care and guide the *muselwa* [newly married mother]. The protection expected by the family and the community from the mother becomes analogous, and termed "mother hen protection", as the mother is related to the chicken which protects its many chicks from bad weather and the hawk. The analogy is this study explains how the mother of an infant provides protection from pregnancy until the infant is above 12 months, where the other family members take over while she is expected to be pregnant again.

***U tolwa ha muselwa* [examination of the bride]**

In indigenous cultural practices, the *muselwa* [a Vhavenda word referring to the "newly married woman" or "the bride"] is groomed by the elderly women in the family. The family assigns an elderly woman and the female family THP to perform a traditional gynaecological examination. The examination is performed to exclude gynaecological diseases, including *rigoni*, which can prevent the muselwa from having children. This ritual is performed in the presence of the bride's aunt or any close female relative for support before she *[muselwa*] is allowed to enter her husband's bedroom.

IKH3 narrated:

Kale mbingano yo va yi na vulema [during the old days marriage was valuable]. After the payment of lobola, the muselwa was taken care of by the elderly women in the family, including the mother-in-law, grandmothers and the aunt of that family [makhadzi], not hezwi zwa maduvha ano [not what is happening nowadays] where immediately after receiving the muselwa, the couple leave for …honey moon, without performing traditional rituals by elders.

THP1 supported IKH3 and said:

There was respect when it comes to marriage in our culture. There was a reason for makhadzi in the family to look for proper wife for her brother's sons. The makhadzi was the main person to facilitate the proposal and the marriage of muselwa [bride]. Muselwa is supposed to report everything to makhadzi before notifying the husband. This relationship starts from the proposal, marriage and during the examination by the elder women to verify if indeed the bride is a virgin and to check for the presence of illnesses like rigoni. U tolwa ha muselwa was very important in our days.

THP11 maintained the processes were involved when the new bride was received in the family and she said:

After receiving the muselwa [bride] in the family, she is introduced to the ancestors so that they can accept her as their child. The mother-in-law teaches her the family chores, the grandmother after discussing with the aunt [makhadzi], invite the family THP to assess the bride physically.

THP1 added that *muselwa* [bride] *u ya fariwa*, literally meaning "the bride is touched'". In this case "being touched" refers to the treatment methods utilised by the THPs to protect people from diseases and other evil spirits from evil people. THP1 said:

I give her mishonga for protection against witches. I examine her genitalia to verify if in deed she is still a virgin and without diseases. I put her on the clean white sheet for genital examination. If I find some disease I will treat her and give her some herbs for protection of her body before she is released to join the husband in the bedroom.

IKH5 added:

The brides which I am entrusted to remain my responsibility. I have to treat her throughout until she falls pregnant, during pregnancy and birth of the baby. I instruct the makhadzi or the mother-in-law to bring her back immediately when she skips a month without seeing her days [menstruation]. I do this to protect the baby inside her womb that is how we treat mothers in our culture.

Some participants disputed the use of the clean white sheet on which *muselwa's* [bride's] genitalia is examined. THP3 said:

Some of healers tell muselwa [bride] to lie on the white sheet for examination of the genitalia to determine her virginity and presence of any diseases such as goni. Goni is an illness that hide in the vaginal wall of women. If muselwa [bride] can bleed during examination, then it is confirmed that she is a virgin and free from illnesses, by ululating and dancing.

IKH5 concurred with the examination of *muselwa* [bride] on the white sheet by stating that it is done for virginity testing and "to check for any presence of diseases that may affect her procreation". There is a cultural belief that the *muselwa* may be sick and can infect the husband, resulting in infertility, which is regarded as taboo in indigenous African people because the role of marriage is for procreation. When the bride is found to have some diseases, she is not allowed in the husband's room. She is given *mishonga* as treatment by the THPs assigned by the family until she is healed.

Natural incubation and brooding

Natural incubation is the process by which the mother hen assists in the development of the embryo within the egg for hatching purposes. During the incubation period the broody hen sits on a clutch of eggs to facilitate the development of the embryo inside. Brooding is the act by the mother hen of sitting on a clutch of eggs to incubate them. The action or behavioral tendency to sit on a clutch of eggs is also called “broodiness”. The mother hen becomes broody after laying about 14 eggs. She sits on a clutch of eggs to provide warmth, humidity, ventilation and regular turning of the eggs for healthy development. Incubating and brooding are vital to acquire new healthy chicks. This natural incubation and brooding by the mother hen was likened by the THPs and IKHs to the natural indigenous processes exercised for pregnant women.

Participants explained that *muselwa* is allowed by the elders in the family to sleep in her husband’s house or room so that they have sexual intimacy for procreation. Participants stated that the bride is instructed to report to the clan elders immediately when she misses her menstrual periods so that the elders can take over the care of the pregnancy. The bride is restricted from performing certain household and community activities as a way of protecting the pregnancy for the nine-month gestational period.

IKH4 said:

Muselwa [bride] is looked after by makhadzi [paternal aunt] to identify if she is ready and active for sexual intercourse. Even if the husband is away for work, he is summoned to come home. Remember in the old days, we used to marry muselwa in the absence of the husband. When the husband returns back to Johannesburg for work, the muselwa must be pregnant. Elders knows very well that the men has worked in the morning well muselwa walks around smiling. She will report that she has missed her month, then the elders smile because they know she is pregnant. The family THP will be informed so that she comes to perform rituals to protect the pregnancy. She is now not allowed to attend funerals, no entering of fields, and to report any unforeseen problem to her mother-in-law. The THP will provide mushonga u tika thumbu [rituals performed to protect pregnancy].

THP13 supported the knowledge of IKH4 by emphasising the importance of communication during pregnancy by the *muselwa.* .THP13 stated that the bride is taken to THP for herbal medicines that will protect her and the baby from evil spirits. THP 13 said:

Indigenous women visit THPs and IKHs for herbs that will protect them against and prevent diseases, such as rigoni…. It is very critical that women report pregnancy to their mother-in-law, who will then report to the family THPs.

THP14 added another dimension by verbalising that the prevention is also done even before a girl child gets married. This participant said:

A girl child is taught to take care of her cleanliness immediately when she starts to see her monthly periods. The young girl is trained to respect her body and her menses, because evil people may take the blood to bewitch her and she will never fall pregnant until she consult THPs. Before the young girl is sent away to her in-laws the family performs rituals to protect her from jealous people. During the preparation of lobola negotiations she is not allowed to associate herself with peers that the family does not approve, because they may influence her to do bad things. The aunt is assigned to perform most of the household chores with her, keeping an eye on her in preparation for the marriage and caring for the future husband during sexual intercourse. The aunt will give report to the elders about anything which is not accepted and indigenous steps will be initiated to protect their girl due to fear of embarrassment when married.

THP10 commented:

Khomba [teenager] must take care of herself. If she does not take care she will contract all these illness and damage her womb. I have seen a lot of young girls struggling to fall pregnant because they neglected traditional practices. Khomba does not share her clothes with other, especially when she is pregnant, people can bewitch you using those clothes. Another thing is that when she is in her monthly period, she does not dispose or display her blood cloth everywhere. She stays away from boys and the mother teaches her cleanliness as the woman. Most of cultural teachings and self-care are taught during vukhomba [cultural initiation school for teenage girls]. The khomba takes care of her genitalia and respect it to remain a virgin and this protect her from diseases. The womb must always be clean and healthy in preparation for the conception. The healthy womb will protect and feeds the unborn baby when protected by cultural rituals.

Women naturally take care of infants from conception, during birth and after birth when the child can fend for himself or herself. In Western practices the mother will take the infant to the clinic for immunisation, while an indigenous African mother takes the infant to traditional practices for the THPs and IKHs to provide traditional herbs as a way of protecting the infant from illnesses. After delivery of the live infant, the mother and other family members continue to care and protect the infant throughout its childhood.

Hatching and rearing

In the lives of chicken, healthy eggs are hatched after about 21 days of natural incubation and brooding. Hatching eggs refers to a mother hen sitting on her eggs to incubate them for the chicks to be born. The broody, as the mother hen is called, continues to brood chicks to provide warmth until their feathers have grown. The mother hen takes care of the chicks, shelters them and protects them with her wings from bad weather conditions and predators such as hawks and any threat or danger. This analogy relates to women who carry their children for nine months during pregnancy.

Very interesting for the researcher was to listen to THPs who related the analogy of the way women protect their babies while in utero and after birth. THPS and IKHs explained that the pregnant woman should keep herself warm and wear respectable dresses to hide the pregnancy. THP9 said:

Immediately when the woman reports that she is pregnant, she is advised to change her clothing. The mother-in-law ensures that the daughter-in-law dresses in a respectable manner such that even the young children may not notice that her tummy is enlarged [thumbu yo hula]. The woman is given large dresses, minwennda [wrapping clothes] and nchalani [shawl] to cover up the pregnancy as a form of protecting the baby inside from evil people. The pregnant woman must be kept warm all the time because if she does not keep warm, it will affect the baby inside and she will have difficulty on the day of giving birth. We do not allow the pregnant mother to take ice cold water because it causes cold to the unborn baby. This is our cultural practices, young women should follow this for their safety and to give birth to a healthy baby. The baby may be born with illnesses she acquired from the maternal womb. We always guard against these bad occurrences for our children.

IKH2 echoed:

Yes! It is true that the baby and the mother should always be protected from harm by nature and evil people. The indigenous pregnant mother is kept warm all the time, that is why she sleeps in the tshitangani [traditional kitchen] because hu dzula hu na mulilo [there is always fire] for cooking and for the grandmother. The woman will give birth in this warm environment and will be assisted by the assigned elderly birth attendant. All these things are done to protect the baby from harm and illnesses.

THP1 supported the idea by maintaining that the mother is supervised to care for the baby in a warm environment, bathing and dressing warmly. The baby will be covered with a warm baby shawl and a maternal shawl, be nicely wrapped and expose his or her face only. THP1 explains:

After the birth of the baby, mubebisi [traditional birth attendant] covers the baby warmly in her [baby] clothes, wrapped warmly and only the face is left outside for identification. Even the father of the baby will see the face when he is shown the baby at the entrance of the tshitanga [traditional kitchen] without touching her. The father is not allowed to touch the baby as he is considered not clean and he may cause sickness to the baby. The elders prevent all other family members to touch or enter the tshitanga where mudzadze [postnatal woman] as a preventive measures. The mother keeps her baby on her arms all the time unless the baby is asleep, where the mother will be put the baby on the comfortable prepared bedding, and she rest around and only goes outside for the toilet. She always keeps an eye on the baby, all household chores are taken over by others and her food is prepared by the assigned elderly woman. It was very good in those days because babies were cared culturally and they will not be sick like the current children. Vhomaine use to do a good work for the baby and her mother.

When the infant is delivered, an elderly or THP assigned to take care of the mother during pregnancy examines the baby for any abnormalities and some diseases such as *rigoni.* IKH6 stated that she assist the woman in labor and during delivery of the baby, using her skills and experience as a traditional birth attendant.

IKH6 said:

I am assigned to help the woman to deliver a normal healthy baby because I use mishonga to protect the mother and the baby from evil spirits. When the baby is born I check her from her to toe for diseases from the mother's womb. I will perform rituals for the baby, call her by clan name, ancestor names as a way of notifying the ancestors of the baby to come and protect their grandchild.

THP7, a diviner, said:

When the mother is pregnant, I consult thangu [traditional throwing of bones] to check if everything is good. Remember that not all people around you like to see others having babies, there have jealousy. Thangu, through ancestral spirit, will tell me that I must give the woman mishonga to protect her and the baby. Sometimes I tie her waist with medicated charm from pregnancy until the day I assist with the birth of the baby.

THP10 stated that *mudzadze* [postnatal mother] is kept away from other people and elders assist her with the baby. This is what THP6 has to say:

U ri nwana a so ngo fhariwa nga malwadze [for the infant not to contract illnesses], I do not allow anyone to enter the room where mudzadze is. Mudzadze sleeps in the same room with the grandmother, we use the tshitanga [traditional kitchen] because it is warm and the baby is protected from cold and bad weather.

IKH3 supported this activity by explaining that the baby and the mother are protected from many diseases that may be caused by evil spirits and bad people. This protection is achieved by restricting access to both the baby and mother. Even the father is not allowed to enter where the baby is kept, it is regarded as taboo as the father may not be 'clean'. During this period, the THP performs family rituals such as *u thusa nwana na u mu thavhela nga mishonga u ri a so ngo fhariwa nga malwadze a vhathu* [literally meaning "performs rituals in African culture using traditional herbs to prevent people's diseases such as *rigoni"]. Malwadze a vhathu o dalesa, a tshi fhara nwana a ya huvhadza, u fana na goni hezwi lo pfhukela kha nwana li dzi fha maanda, la jiya na mutakalo wa nwana* [there are many people's diseases, when they affect the infant, they become dangerous, like *rigoni* when it has been transmitted to the infant, it *[rigoni]* becomes powerful, strong and takes away happiness from the infant]. The infant who is ill as a result of *rigoni* acquired from the mother deteriorates in health. The infant presents with symptoms presented above.

Category 3: Infant as victim

The analysis yielded also a category on the infant as the victim of *rigoni*. This category is sourced from how the father transmitted the illness to the mother who carried the baby in pregnancy until birth. There were different views amongst THPs regarding the origin of the condition rigoni. Some THPs felt very strongly that the condition is carried by the father who acts as an agent and transmits it to the mother, who is the host. However, other THPs indicated

that the condition originates from women who contract it during their puberty. THP3 had this to say.

Rigoni is with the mother, and then transmitted to the infant. The illness attacks the infant suddenly during birth or sometimes while the infant is still in the womb because rigoni is with the mother. The woman should consult Vhomaine when she is still pregnant for [u tola na u tika thumbu] examination and to strengthen and protect the pregnancy from bad people.

THP8 argued that *rigoni* is the women's illness, especially when they are pregnant, the infant contracts the illness from the mother while in utero or during the normal vaginal birth. She said:

This illness of rigoni is a mother's illness, hu si nwana [not infant]. The mother transmits it to the baby when she is still pregnant or infects the baby during delivery. Rigoni stays inside the uterus. There is the time where rigoni will allow the baby to grow until is time for delivery, then on the day of birth rigoni knocks the infant as it passes through the birth canal. This is rigoni, which survives on the wall of the vagina.

Other THP2 and IKH5 claimed:

You know what? The baby get rigoni from the mother because it cannot fight for itself. The blood of the baby is not strong to fight illnesses which the mother is suffering from. It is like if the mother is coughing due to flu, the baby will suffer from flu spread by the mother. It is the same with rigoni, the baby is unaware of the surrounding and cannot avoid to be the baby. The mother as the host of rigoni will then infect the baby innocently, especially young modern mothers. When the baby becomes in contact with the maternal mucous membrane of the vaginal wall, then she get the illness and become sick.

Another assertion was from IKH5 who said:

The baby is just punished for the action of the parents, especially the father. Fathers are the ones suffering from this condition and they transmit it to the woman at mabayini. [mabayi are blankets, referring to sexual intimacy]. I am saying rigoni is caused by you two, the father and the mother. It is not only woman, even men suffer from rigoni. When u nghena n'wasati u kha u vabya goni [have sexual intercourse while suffering from goni], the mother get rigoni and later transmit it to the baby inside.

The same sentiments were seconded by THP14 who said:

Men do [not] not like to be checked for illnesses. They stay away and [are] involved in polygamous relationships and get these diseases. When they come home to their wives they sleep with them and transmit the illness to the mother[s]. The mother[s] will then transmit it to the unborn child[ren], or transmit it during birth. Husbands infect the wives. It [rigoni] is on the tip of the penis and sometimes at the anus of males.

THP3 raised her concern and said:

The baby is innocent. When it is passing through the birth canal rigoni will hit the infant hard on the occiput, neck or part of the head and other areas of the body. Intelligent grandmothers always take their daughter-in-law to the Vhomaine immediately when she reports that she missed the month. The grandmothers knows that the daughter-in-law may be suffering from illnesses that may negatively affect the pregnancy and the baby. The baby is the susceptible host of the disease because the mother is sick.

THP5 explained that *rigoni* in males can be on the anterior [penile] and posterior [anal area], and that the anal area rigoni grows and protrudes, identified by passing of bloody stools. THP12 asserts:

Rigoni is carried by men who spread it amongst women whom he shares the bed with, especially polygamous men. Mostly men does not become sick of rigoni, but can only transmit it to the wife. Women are in danger of receiving the illness and may also conceal it until she is pregnant.

The challenge is that most males do not seek treatment, which is why they transmit it [*rigoni*] to the women who then infect the baby internally and during vaginal birth. The transmission of rigoni from the parents to the infants poses health risks to the infant, thus there is an indigenous and cultural belief that the indigenous woman, to be a good bride, should undergo examination before, during and after marriage to make early assessment for diseases.

Category 4: Indigenous system assessment

The assessment methods used by THPs mostly depend on the nature and type of an illness. Traditional health practitioners are assisted to assess an illness through dreams, ancestors and use of traditional bones as a cultural indigenous practice. Participants in this study were asked: "How do you assess infants with *rigoni*" Their responses yielded two sub-categories which fall under the category of indigenous system assessment: assessment by a family member and assessment by THPs / IKHs.

There are different methodologies used by THPs and IKHs to assess and diagnose diseases. The method used depends on the speciality of the individual THP / IKH. However, all THPs in this study were in consensus that the healer should determine the cause of the illness before initiating any form of treatment. This was articulated by IKHs2 who said:

When the infant is brought to me, I use my experience to physically assess the naked baby from head to the legs. On the head I target the occiput, because that is where rigoni knocks the infant. On the occiput and the neck I expect to see some redness, which informs me that this is the part with rigoni. Through my experience and knowledge I obtained from my grandmother, I check thoroughly to confirm if it is rigoni and treat the baby accordingly.

This view was supported by the IKH10 that the knowledge gathered from elders is used in the assessment of illnesses, particularly *rigoni.* THPs and IKHs remarked that they observed the infant for activity or passivity, examined the naked body for signs of *rigoni*, and that their investigation would be complemented by the information related by the grandmother or the mother of the infant. IKH8 had this to say:

The baby is brought in by the parents, sometimes the grandmother and the mother of the infant to me. They know that I treat rigoni, I have been doing this for many years now. Immediately when I see the baby I detect that the child does not lalama [bright and active, happy and growing well]. The baby looks dull and not moves the arms or legs. I quickly take the baby from the mother, undress the baby and assess the whole body from heard down to the body and buttocks. Sometimes this rigoni can hide, so it needs experience. Because I am not the traditional healer who uses bones to assist with the assessment, if I cannot identify the signs of rigoni I request the grandmother / mother to take the baby to those who will use bones. Bones are another method of assessment which is used by the type of THPs called mungome / mungoma / isangoma [diviners]. Diviners determine the cause of illness by using spirits of ancestors. I do not take chances because the baby's life is in danger.

Diviners use *thangu,* usually from animals and snail shells from the sea, to diagnose diseases. They obtain guidance from ancestors who assist them in the assessment and the correct diagnosis for the correct treatment to be used for the illness.

Some of the participants are herbalists [*inyanga / n'anga / Maine*] and they deal with herbs only to treat the illness. Herbalists possess extensive knowledge regarding herbs and medicines used to manage and cure diseases. The participants that the researcher interacted with were herbalist-diviners. They are able to assess the illness through their divination and prescribe herbal medicines to treat the illness. Those THPs who are herbalists focus on prescribing herbs to their clients, who have been referred by other THPs and IKHs for further management. THPs 4 said:

I receive most of the sick babies from IKHs and diviners who were unable to physically identify the rigoni symptoms or the needed herbs that will completely treat the illness without delaying the baby, especially when the baby does not look good and parents started to panic. My job is to use the herbs to treat the baby, I do not diagnose the illness, and I know the herbs that treat this illness.

THP9 and THP5 concur with THP4 by emphasising that diviners and IKHs normally do not treat rigoni, but they diagnose and seek assistance from herbalists for herbal medicines which must be used be the baby. THP9 said:

I do not give the mushonga [medicine] to my baby and the mother, but I only consult thangu to make the assessment. Sometimes babies I brought here thinking they are suffering from rigoni*, only to find that there are other family problems which the ancestors are not happy with, thus punish the baby for the wrong action of parents. I use thangu to make the assessment for all my clients, young or old, it helps a lot. When I have made the assessment, because I do not know much about herbs that treat rigoni, I send the baby to the herbalist for assistance. We have a good relationship with the herbalist that I refer my babies to, and they get help immediately.*

THP5 had a different view on being a diviner and the referral of the baby. This THP practices as a diviner, but she also prescribe herbs for all the babies that are brought to her. This is what she said:

It is good to help babies before we lose them. With my experience in the treatment of rigoni, I do not waist time sending the baby up and down. I assess the baby on the head, neck and shoulders, then the body and the buttocks. Sometimes rigoni hides, especially on babies with dark skin, so I consult tinhlolo [Xitsonga word for "traditional bones"] to make the assessment and also to check if the baby does not suffer from other illnesses. When I diagnose the illness, I know what treatment to give. I got this knowledge during my training to be the healers. My teacher taught me everything, she said she does not want me to suffer when dealing with sick babies. I know we are all called "tin'anga" [THPs], but we do different work. I do receive babies referred to me by other healers, especially herbalist, because some mother just take the baby to any healer, not knowing what type of a healer that person is.

THP 5 maintained that she practises as a diviner and herbalist. Here is the excerpt: *Ndi shumisa zwothe [I use both divination and herbalism]. I use traditional bones and when I find the illness I start the treat before it is too late. I do not want to miss the illness by using thangu… sometimes is not goni fhedzi [not goni only], therefore you must use thangu as well to make sure about the problems of the infant and the family.*

THP3 raised similar sentiments by stating:

For me not to miss the illness when I am busy checking the baby, I consult my bones. My bones will help me to ensure that the baby is suffering from rigoni or other problems such as bewitched. Most of the times I find that there are many problems in the house than rigoni, maybe the ancestors are angry for being ignored by parents, or bad people bewitched the baby or the baby need the ancestral name. Thangu dzi do mmbudza, kana nda zwi vona kha mulorho u ri nwana u tshwenyiwa ngamini [Bones will tell me, or I will have a dream from ancestral spirits what problems are faced by the baby].

THP6 and THP11 revealed proudly that they rely on bones to make the assessment before venturing into treatment. The THPs relies on special tortoise bone that informs them that the infant has rigoni. They stated that they were shown the tortoise bone as the diagnostic bone for *rigoni* by their ancestors. THP6 explains:

I sometimes use thangu amongst all the bones… one bone will inform me that the infant has goni. I have been shown by my ancestors to use bones, but remember that some do not use bones, we are not gifted the same. I sometimes use bones to assist me in the diagnoses of the illness and other family problems.

THP4 supported the idea by stating:

The use of thangu is very helpful when patients consult. For goni not all bones will inform me about this infant illness, but only one tortoise bone. … I use bones [thangu]. There is one bone which will inform you that the infant has rigoni. The other bones will report other family or individual problems, but the tortoise bone specifically deals with goni illness because the tortoise lives for many years, though moving slowly, which is the same as the baby who must grow slowly and live long.

She was supported by THP6 who said:

Thangu dzo fhambana u ya nga malwadze /traditional bones are different according to illnesses. For the infant whom the mother or parents brings to me for treatment I use all the bones, but one bone speaks for rigoni, that is I rely on the bones of the Tortoise [tshibode] which I am shown by my ancestors. Only Vhomaine knows why we use this bone for rigoni. I cannot tell you that because it is not allowed by the ancestors.

Some of the THPs use both methods to assess the infant's illness; that is, comprehensive physical assessment and the application of traditional bones. Traditional health practitioners emphasised that there was one specific tortoise bone that diagnosed *rigoni.* The researcher was invited into one of the diviner's practice to view the methods and the room used when clients visit for consultation. There are many traditional bones which are kept in an indigenous traditional bag made of animal skin. Amongst the bones there is a particular bone from on which the THPs rely to diagnose *rigoni*. The bone is believed to be from a tortoise - a tortoise is a slow-moving typically herbivorous land reptile of warm climates, enclosed in a scaly or leathery domed shell into which it can retract its head and thick legs (online Cambridge Advanced Learner's dictionary and thesaurus). Traditional health practitioners and indigenous knowledge holders use different methods to examine women and make an indigenous cultural assessment, which will lead to proper indigenous management within the society.

Category 5: Indigenous diagnosis

The illness *rigoni* is confirmed in the infant by the THPs / IKHs through their use of various techniques such as assessment, observation of redness and discoloration on the occiput and neck regions. Traditional health practitioners and indigenous knowledge holders also use *thangu* (traditional bones and specifically a tortoise bone). The use of *thangu* for divination affirms whether the illness *rigoni* was caused by nature or unnaturally through sorcery and witchcraft (Awah et al 2009:6). The experienced THP or IKH affirms and declares that the infant is suffering from *rigoni*, and there is a need for the IK healing process.

THP6 said:

I sometimes use thangu [traditional bones used by THPs] to confirm my assessment and observations. Among all the bones, there is one special tortoise bone that will inform me that the infant has rigoni. I have been shown by my ancestors how to use bones.

THP 18 explained:

When the infant is suspected that she has rigoni, I determine the causes of this illness. Some infant presents with signs that are indicative of rigoni, meanwhile it is due to other family problems or the ancestors are using the infant to punish the parents. I consult my bones to assist me in the diagnoses to be sure that the illness is rigoni and not other family problems. I cannot initiates the healing process without confirming the illness, so that I give the correct medications.

The confirmation of the illness *rigoni* empowers the THPs and IKHs to initiate the IK healing process of *rigoni.* The THPs and IKHs rely on the assessment techniques to arrive at the indigenous diagnosis.

Category 6: Indigenous healing process of *rigoni*

In this study the management of the illness *rigoni* involves the systematic coordination of indigenous African interventions and communications by the THPs and IKHs on women and infants suffering from *rigoni*. During data collection and analysis two sub-categories emerged regarding the indigenous management of *rigoni*: maternal- and infant healing. Each sub-category consists of its properties; for example, maternal deworming, infant smoke inhalation.

Maternal healing process

Indigenous traditional mothers commonly seek healthcare for their infants' illness, rather than for their own, from the THPs and IKHs because of cultural beliefs and family practices. Participants in this study explained that *rigoni* looks like *zwivhungu* (worms) with a black head. *Zwivhungu* are found on the vaginal wall of the mothers and cause irritation when they move around, triggering the mother to scratch the wall.

Here is what THP4 reported:

Rigoni is in the genitalia of the mother, it is found on the part of the vagina, on the wall. Rigoni are worms on the vagina which are identified by a black head. These zwivhungu [worms] may be many, three, four, six, and seven, sometimes eleven. There are worms which move around the vaginal wall. When they tshukunyuwa [move] they cause irritation on the genitalia, sometimes women are embarrassed to scratch in the presence of people. Women do not come to report because reproductive matters are not discussed publicly but remain private. Women are afraid that the will be regarded as promiscuous and unfaithful when they have these symptoms.

Other participants viewed *rigoni* as pimples or sores found on the vaginal wall of the mother. Since sores or pimples may cause itchiness, the woman might scratch when she is in a private space, rather than when in public because of fear of embarrassment. Participants explained that they remove many sores or pimples on the maternal vaginal wall.

THP6 reported the following:

Most of the time I am able to remove many sores / pimples, 6, 7, 10, 11, 12 sores [zwipundu] from the woman. Nndi tsheya hune nnda vhona zwipundu [I excise where I see the sores]. These sores are painful and irritates the wall of the woman. Some women try to withstand the itchiness while they amongst other people, zwi a shonisa u kweta hafha fhasi muthu a vukati ha vhathu [it is embarrassing to scratch while amongst people, it shows no respect for yourself as a woman].

As indicated before THPs or IKHs treat *rigoni* differently, depending on their training and experience, as well as how they have diagnosed the illness. The participants alluded to their practice of excising the worms, sores or pimples from the maternal vaginal wall as a form of treatment. This procedure on the removal of worms by excision can be viewed as deworming. The THPs indicated that they used new razor blades. All the participants indicated that for treatment of rigoni two new, clean razor blades are needed; one is for the mother and the other one is reserved for the infant. The participants who described *rigoni* as black-headed excised worms from the vaginal wall mixed *zwivhungu* with indigenous herbs to make mushonga (a traditional herbal medicine). The mixture is then used to treat the infant as well as the mother.

THP5 said:

I use tshipangana [razor blade] to remove 6, 10, 7, 11 worms from the mother of the infant. Ndi tsheya kha mudzadze nga tshipanagana tsho hu halifha u ri a so nga pfha vutungu. I make sure that I excise with a very sharp razor so that she does not feel the pain. Women are supposed to withstand pain otherwise. This pain is not like the pain she feels when giving birth. Culturally women must be strong. Hezwi zwivhungu [these worms] are mixed with traditional herbs, grinded and burned to form ashes that will be applied on both the infant and the mother.

THP13 had a different view on the maternal management of *rigoni* by stating that she incises the woman on the thigh, abdominal wall and the spinal cord area. She further explained that after the incision of the different areas of the body, she applies *mushonga* as a way of treating *rigoni*. According to her this intervention is done for both the mother and the infant. This is what she stated:

I treat rigoni differently from others, because after cutting the mother and the infant, I give them medicine to use for two days. I cut the mother not inside, but on the thigh, even just underneath the stomach. Then on the spinal cord, I apply mushonga on the bleeding area, I then give them some mushonga [medicine] to use at home in soft porridge for both mother and the infant. I do not remove the anything from the mother, there is nothing to remove because it is painful for both of her. There are many ways of treating rigoni.

Other THPs and IKHs explained how differently they manage the woman without causing any pain by maintaining that rigoni treatment should not include excision or incision. The woman is given traditional herbal medicines with clear instructions to follow at home, such as vaginal padding of the medicine.

THP3 said:

The traditional herbs are grinded and mixed to form a small ball. I give this ball to the mother to insert underneath, on the vaginal introitus and sleeps over with it. I instruct her to return the following day in the morning for further treatment. The following day in the morning I take the ball out or ask the mother to remove it herself. I place it in an open for drying as it will be wet, if not wet then I know the woman is trying to cheat, she did not place this medicine in the vagina, thus she is interfering with the treatment. The medicine kills the illness on the vagina

permanently, so if it was not place then the illness will not be killed. The ball will also be smelly as a sign that it is from the private parts, the vagina of the mother.

THP7 and THP8 shared similar sentiments by emphasising that the woman is examined, and an assessment is made that she has *rigoni.* The mother is then given some herbs wrapped in a newspaper to insert in the vagina for an overnight sleep as a form of treatment. THP7 said:

I do not excise anything from the mother, but I give the mother herbs wrapped in a clean newspaper to place in-between her legs on the genital area, that is padding, when she goes to sleep, usually around ten (10) in the evening before going to bed. During this time of the night as a woman she has completed her day's work and goes to rest. She will be supervised by the mother-in-law or her grandmother to perform this task. They will return the following day in the morning. I check the medication, which must be wet and smell from the vagina. If it was not applied as I instructed her, I will see it, she will not rob me I know, I have been doing this for many years since I was very young age [nndi kha dzi vha khomba] as a teenager.

Traditional health practitioners and indigenous knowledge holders approach *rigoni* in different ways, depending on their training and experience. As indicated in the quotations above some THPs and IKHs go further to excise the vaginal wall where *rigoni* is embedded. The excised rigoni is then taken to *tshidongo* [clay-made bowl from broken clay pot] to be mixed with traditional herbs and burned. The burned mixture is applied to the excised area. This was confirmed by THP9 who said:

After checking the mother and I notice that she has rigoni, I give her herbs to pad during the night and has to return the following day in the morning, where I will take out the padded herbs, and then I excise the vaginal wall. Uhm….goni ali fheli [rigoni does not comes to an end, it recurs].

And THP10 who indicated that rigoni is in the form of sores expounded that:

There are many ways of treating rigoni. The medicine is given to the mother to place in the vaginal area. The mother sleeps overnight with the medicine, the following day she returns with the medicine and the infant. I request her to remove the medicine from the vagina in my presence. I use my sharp razor blade to excise the sores, I take the sores and mix with my medicine and burn on the tshidongo.

Traditional herbal medicine is believed to be a fundamental part of the human culture since ancient times. The preparation of herbs is carried out in accordance with the diagnosed illness.

In the case of *rigoni* the mixture in the *tshidongo* is prepared to be used in the treatment for both the baby and the mother. Participants in this study explained how they prepare the medicine for the treatment and management of rigoni from the mother of the infant suffering from this illness. THP5 said:

I take the excised sores or pimples and put them on the clay play. I use fire coal to burn in combination with my indigenous herbs. I also grind the mixture to make it easy to burn. I take the mixture and give to the mother for application when bathing… it is long that I have been doing this job… the mother of this trainee was still very young when I took over from my grandmother. The excised area is bathed with traditional herbs. The mother may also use salt dissolved in water when bathing. This helps in the healing of the excised vaginal wall off sores.

The preparation of the traditional herbs includes mixtures of different herbs, excised tissue from the mother, grinding and burning inside the *tshidongo* until the mixture is black for easy application. This is what THP6 said:

The excised sores are mixed with traditional herbs and burned them. I grind this mixture until it very fine and black in colour. I take this fine black ash and mix it with Vaseline so that I can apply it with ease on the excised area. Some of the herbs are reserved to be used at home when she bath, especially her private area.

The participants concurred with each other on the mixing of excised tissue with indigenous herbs to make a concoction that is used to treat *rigoni*.

The other way of treating rigoni and maternal protection from external forces is the use of amulets. The participants explained that mothers are given waist amulets after being treated for *rigoni* as a protection from evil spirits. The amulet is soaked in herbal medicine and is kept by the mother until it drops off on its own. THP3 said:

I give the mother an amulet soaked in traditional medication to put on her waist. An amulet is prepared with a combination of threaded wools. The thread will automatically wear off, and then it is thrown into the toilet *ya dindi* [referring to the pit toilet commonly found in rural areas].

While THP6 said:

I prepare the amulet from the wools. I knit them together to make a rounded belt, I then soak it in the mixture of herbs. I reserve the small piece of thread for the infant to tie around the waist and wrist. The mother assists in tying the infant around the waist as part of the management of rigoni. She does not remove this belt even when she washes herself. The threaded belt will fall off in due course without being removed. Once it falls off, it must not be retied, this means the rigoni has been managed and she is protected from other communicable diseases.

The management of *rigoni* by THPs and IKHs for both the infant and the mother are done in similar fashion when it comes to the use of traditional herbal medicines. The initial management of *rigoni* focuses on the mother and then the management of the infant, as some of the products removed from the mother are used on the infant during the treatment.

Infant healing process

It is believed that infants contract *rigoni* from the infected mothers while the mothers are pregnant or during birth. Conversely, there is a cultural belief that any infant illness that may occur during pregnancy may be regarded as punishment or a curse by angry spirits or the ancestors for disobedience or taboo behaviour and / or a curse from evil people. Therefore, it becomes necessary in African culture to implore traditional healing and care to strengthen the pregnancy and to treat the illnesses by performing indigenous practices and rituals.

One of the processes during the treatment of *rigoni* is the use of traditional smoke when the herbs and sores or worms excised from the mother are burned. In this case, the naked infant is rolled over the smoke of the burning concoctions as part of the management of *rigoni*. This process, according to THPs and IKHs, facilitates the prevention of sorcery and for *u thusa* (a ritual performed to all indigenous African infants after birth to protect them from different illnesses and sorcery).

This practice was supported by THP6 who said:

During the burning of the mixture an infant u ya arhavhela mutshi [inhale the smoke from burns]. I am doing this so that nwana becomes used to the treatment and be accepted by his or her ancestors. By the way we also put snuff down as a ritual to notify the ancestors that I

am about to treat their grandchild. I carry the naked baby on my hands and move him around the smoke to cover the whole body. The excised worms or tissues and my indigenous herbs burn until it is black ash. I will then put the baby on my lap to continue with the incision.

THP7 was in consensus with the practice mentioned by stating that she does not incise the baby as she feels for the tiny baby with little blood. THP7 uses only smoke inhalation when treating the baby. The smoke results from the burning substances from the traditional clay bowl as a preparatory process for the concoction. These were her sentiments:

Mina na chava ku tsema n'wana [I am afraid to incise the baby]. The baby does not have blood at this age. I do not cut the baby. I use external medicine only for smoke inhalation [murhi wa ku arhavela] from burning herbs and the excisional tissue from the maternal vaginal wall where rigoni has occupied.

THP9 acknowledges the use of smoke during the treatment of rigoni by affirming that during the procedure of treating *rigoni*, the baby is rolled over the smoke from the clay plate. The baby is kept naked until the procedure is complete so that the body can absorb the medicine. This is what she said:

The naked infant is rolled over the smoke and the smoke dies down. I perform this work inside my practice because it is warm and there is the presence of the ancestors to protect the baby.

The inhalation process also plays a part in the *u thusa nwana* (cultural ceremony performed to immunise the infant), preventing him or her from evil spirits and bewitchment. Hence the inhalation forms part of the THPs' rigoni comprehensive treatment and stems from the supposition that the infant is to be brought back for *u thusa* (cultural ceremony performed for immunisation). The smoke of traditional herbs is believed to be harmless to the infant and facilitates the healing process. In support of the above mentioned statement THP4 said:

The baby that has been brought to me suffering from goni need urgent attention because I may lose her. I check the baby throughout the body until I notice areas with red marking. I take my new, clean razor blade and make some small cuts on the infant. Very little bleeding with be seen, I will quickly apply mushonga wa nga (indigenous medicine or herbs)…. Nndi thavhela hafha…na hafha kha mukulo wa nwana nga murhahu [I make small cuts here…and here on the posterior aspect of the neck]. The infant will be crying and sometimes the mother get annoyed, but I know is for the good of the infant. When I am done with the application of

the medicine, I ask the mother to start breastfeeding, you will see the baby stuck on the breast, even if she was brought refusing to feed. This is nothing. I am able to treat babies and their mothers with good success.

THP5 further added the process of preparing the medicines that are used to treat the infant as follows:

When I treat the infant, I take the excised sores from the mother and mix it with the haya a thavhani - mpfhene [baboon faeces] so that nwana a so nngo tshenuwa [irregular movement of infant as if has been frightened – fits or seizures] and add my herbs. Ndi shumisa mapfhura a mpfhene for u thusa nwana [I use the baboon's fats to perform cultural ceremony for immunisation of the infant]. It is done together with treating rigoni, otherwise they will come back for the performance of this ritual. This mixture is not applied on the face or head of the infant, but on the anterior fontanel. Baboon fats is applied during the night to protect the infant from witchcraft because evil people use the baboon to bewitch infants.

THP8 supported the other THPs quoted above by explaining that she asks the mother or the caregiver to fully undress the infant. This is done inside the hut where all traditional rituals are performed to protect the infant from cold or rain:

I kindly request the mother to undress the infant fully. I assess the area where the infant tries to scratch, usually the neck or occiput. [When] I notice the red spots, then I know it is goni. I ask the grandmother or the mother to give me the sharp knew razor blade. The grandmothers know that I need knew razors, one for the mother and one for the baby, so they always brings them along because they know tshi do shuma [it will work properly]. I then make small cuts for little bleeding. When blood start to come out, I apply the concoction to treat and destroy goni.

Some participants stated the reason for using the baboon faeces and fats by explaining that the fats are used to protect the infant from evil spirits that may endanger the infant's life. The participants further alluded to the fact that different herbs and methods are used to treat and protect the infant – including the wearing of amulets, topical application of herbal medicine on the body, licking with the tongue, adding in the soft porridge and ingestion in the form of water. THP10 said:

Other concoctions are mixed with Vaseline [petroleum jelly] applied to the infant's body and on the head and face…I usually do this to protect the infant from evil spirits and other bad people who may attempt to harm the infant.

THP4 concurs with other THPs and IKHs by saying:

There are separate herbs for treating the infant…The concoction is from the excised tissue which is mixed with herbs. The mixture is then burned and grinding is done. The infant is opened the mouth and I make to lick with the tongue the concoction.

IKH6 explained how she prepares the traditional medicine that should be taken by the infant, and she said:

Mishonga ya nwana [the infant's medicine] is for the infant to sip and drinking using a teaspoon. I give the baby grinded [sinda], boiled and medicines before feeding her. Because mishonga yi nnga vha I minji [medicines may be many], I write a small paper and put inside the medication as a label for the mother to follow the instructions. Nowadays it is easy because young mother vho njhena tshikolo [literate], they can read and write.

THP7 said that she uses three types of medicines to treat the baby from different plants that are available in her area. She stated that she uses the plants' roots, leaves, bulbs and sometimes the bark of the plants. THP7 said:

I use only three different herbs to treat my infants suffering from rigoni. For drinking by the infant the herbs are soaked in water before serving the baby with a teaspoon. The very same water is used when preparing soft porridge for the infant. I use roots of special trees and plants, bulbs that are available in this area. I also give the infant the grinded herbs in the form of powder to licks. It helps a lot, otherwise we lose babies.

THP8 added:

Some herbs are taken with the soft porridge. The mother prepares soft porridge using water in which herbs has been soaked and some of the herbs are licked by the infants for days and some are for drinking using a teaspoon.

The participants emphasised that incisions made will bleed slightly, and then the concoction is topically applied as a way of indigenously treating and managing *rigoni.* The concoction is the mixture of different herbs, animal products, leaves, bark, minerals and fats to form a strong herbal medicine. Some THPs use the concoction and add the baboon faeces and fats when they perform the traditional strengthening and immunisation of the infant *[u thusa].* When the THP's work is complete, some participants echoed that the baby should continue taking the medication at home.

Different THPs use different traditional herbs when they indigenously manage the infant illness *rigoni*. The purpose of the management is the same, but the approach differs because of the different ways of training and guiding from the ancestors. As can be seen from the quotations set out above, some THPs and IKHs use three types of traditional herbs and some four herbs from different special trees. The herbs are used for licking, drinking, and bathing, eating in soft porridge and also for body application. Some of the participants explained how to protect the infant from evil people by ensuring that the baby wears an arm charm. This charm may be from the skin of the goat killed during the ritual performance in the family to welcome the baby or from the woollen material.

The skin or woollen material has been soaked in indigenous traditional medicines by THPs. THP4 said:

Some of the babies who are brought to me have problems with their ancestors. That is why when I want to be sure that the baby is sick and what caused the sickness, I personally consult traditional bones. The bones usually clarifies the need to perform rituals such as the killing of the goat through the guidance of the family ancestors. The skin of the goat will be used as the baby's carrier after it has been worked with herbal medicines. Part of the skin is excised to make a wrist amulet for the baby.

Traditional health practitioners and indigenous knowledge holders use herb extracts from different roots, bulbs, leaves and bark of different special trees as medicines to treat *rigoni*. The names of the special trees / plants were not clearly disclosed as they are believed to be sacred. Some of the body parts where the concoction is applied include the reddened area, joints and the anterior fontanel of infants. It is an indigenous belief that the application of the concoction on the pulsating fontanel facilitates the fast hardening of the fontanel.

The duration of the management of the infant illness *rigoni* is not specific, but some THPs recommend at least four days or until the medication is finished. The infant has to complete the course of the herbal treatment for it to be effective. According to the THPs' and IKHs' explanations, if *rigoni* is not treated the mother and the infant may suffer complications, which could result in increased infant mortality.

Paternal *lukuse* and *rigoni*

Paternal management differs from maternal- and infant management. There were few THPs and IKHs who mentioned how they treat *rigoni* from the father because they claim that men do not suffer from *rigoni*. However, men suffer from *lukuse*. The THPs / IKHs dispute the likening of *rigoni* with *lukuse*. The condition that men are believed to suffer from is termed *lukuse or voya* [hair-like structure]. THPs and IKHs use different approaches to treat the condition, as they view it differently depending on their training and experience. Some consider *lukuse* to be related to *rigoni;* some THPs disagree.

Participants claimed that *lukuse* is found on the vaginal wall of the mother, while others contended that it is located on the anal and / or penile tip of males. In this quotation the participant looked at *rigoni and lukuse* as the same condition that affects the father, the mother and then the infant. THP5 said:

Goni may not be seen in the man, or if seen it is here on the anal area. Men usually do not seek help when they are sick, unless when they are forced by the elders in the family because they are unable to bear babies. Men always take time to consult until the illness is too strong for them to go to work. There will be itchy lukuse on the vaginal wall.. I treat all of them the mother and the father because they are all sick.

THP9 explained that men remain the carrier of diseases because they do not seek assistance while the illness is still weak. This is what she stated:

Men are too shy [vhanna vha ya shona] to consult vhomaine kana madokodela a tshikhuwa [traditional health practitioners or Western doctors]. Men does not want to be seen as weak in the family, which is our culture. I treated men who were brought by the elders because he is infertile. Elders expect to see many grandchildren after the marriage, so if the woman does not fall pregnant, they suspect fowl plays either from the maternal side or the paternal side. They are all brought to me to check and treat them for goni. The woman will conceive within

a week after using my medicines. I know fathers avail themselves in private only when they cannot give birth.

As *lukuse* is believed to be common in males and located in the anal area, it is excised with a sharp blade. When the wound starts to bleed, traditional herbal medicine is applied for coagulation and to treat the illness. Some of the THPs said that they perform *ndilo. Ndilo* is when the man is instructed to sit on the *tshidongo [piece of broken traditional pot made from clay]*, with mixed herbs for some time during the treatment of *lukuse.* When the man stands up from the *tshidongo*, there will be worms that came out of the anal area. THP2 argued:

I know and have experience about men whom I treated lukuse. The majority of men suffer from lukuse not goni. Lukuse is very dangerous if not treated by Vhomaine because they are the one who knows these indigenous illnesses. Most men when they have women, after sexual intimacy with this woman, she dies because of lukuse. He may marry many wives and they will all die, without being noticed by people that this man is sick. Men hide their illness even if they feel weak they do not consult us as healers. But if this man can be sent to ndiloni [piece of broken clay pot with burning herbs] for treatment by THPs who know, maybe he can be healed. Men I treated for lukuse nga u vha yisa ndiloni [taking you to sit on the piece of clay pot burning with traditional herbs or medicine].

THP1 elaborated on how she excises the protruding hair-like structure from the anal area of men and she said:

I excise this protruding hair-like structure. It will bleed dark blood. Then I apply traditional herbs to stop the bleeding. By doing this I will also be treating this illness which is dangerous in the family. I use three traditional herbal medicines, one for oral drinking, one for topical application and the last one to be taken with soft porridge in the morning daily until it is finished. The man must follow my instructions to be healed.

Different herbs used

Traditional health practitioners and indigenous knowledge holders mix natural herbs with animal and mineral products such as reptiles, skin, whole meat, fat, blood, feather, bone, dung etc. to form the herbal medicine. The participants mentioned names of plants and animal products that are commonly used in the treatment (Table 4.4). Indigenous people from different localities have different specific knowledge on plant and animal names and their

usage. The healers use plant species that are consumable in the form of leafy vegetables, tubers, leaves, stems and bulbs.

Some THPs and IKHs purported that it is prohibited by their indigenous practice to share the names of the plant species used in the treatment of different diseases. As the researcher had established strong trust amongst the THPs and IKHs, they were able to share the information telephonically, although they refused to divulge the specific preparation and the specific uses of the plants and / or animal products. THP2 said:

I use four types of indigenous traditional herbs. These herbs are always kept ready for use. They are generally called 'dzitsemo' [compound of mixed plant and animal origin to form a paste]. It is not allowed to tell anyone, it is a secret. It is prohibited by our traditional and ancestral practice. We are afraid of the western practice who comes to ask for knowledge and then disappear to use it as theirs. The western people used to benefit from our indigenous African knowledge without payment and own the knowledge as theirs and we die of hunger as there will be no money coming from the patients that we used to treat for different illnesses.

THP12 opened her statement by claiming that infants die in hospitals as a result of lack of knowledge regarding *rigoni* and its management. She stated:

Mothers need to be clever and look for alternatives to assist the infant because if it persist then the infant dies within days under the watchful eye of doctors and nurses. When the parents brings the infant to me, I hit rigoni hard [ndzi ba rigoni swinene] using two herbs from xidorhwani [small prickly-pear] and nkolombyani [lizard]. Next time when you visit here you must contact me I will bring the traditional herbs that I am referring to for your assistance. I do not want to be selfish when it comes to helping the children, they are our children we must love them by saving their lives. I can see that you want to know my child to help others. I will teach you with open arms. I cannot tell telephonically the name of this herb, it is not allowed by our practice. But if you were here seeing you, I will share and show you these herbs. I will show you even if you are not a traditional health practitioner, you need to have this valuable indigenous knowledge. Some sell this knowledge for money.

During a telephonic interview THP3 said the following words regarding the types of herbs used to treat *rigoni*: It is true I use special herbs to manage my patients. *Ndi shumisa mishonga*

mitanu [I use five types of traditional herbs]. I will tell you their names. I use *murundelatshotshi (Crotalaria), mpeta (Osyris lanceolata Hochst & Steud) and mulivhadza (Lannea schweinfurthii). Murundelatshotshi* is used to destroy and kill the illness which the infant is suffering from. *Mpeta* is used to prevent the illness from recurring and *mulivhadza* makes the infant to forget about the suffering she experienced. *Mulivhadza is* also used for people with stress due to loss of the husband or wife. The mother is further given another traditional herbs to insert and keeps it for two days to destroy the illness.

THP5 added this:

Tshilala is one of the infant illnesses shown by diarrhoea and a sunken fontanel. For the treatment of tshilala, if the infant with rigoni also presents these signs I use a separate traditional herb called tshiphandwa. I use the roots of tshiphandwa by soaking in water to prepare for the cooking of soft porridge that will be fed to the infant until late childhood. It helps in the prevention of some indigenous illnesses like tshilala in infants.

THP12 also supported the names of herbs used in *rigoni* management:

I dig roots of these indigenous plants as directed by the ancestors and my training. I use mupalakwali. I wash them and soak in water for drinking by the mutanzwa infant. I will only give you their specific names on face to face. For now just know those three which helps in the relief of pain on the infant. One of the herbs which I mix is murumelela.

Some of the THPs who were interviewed telephonically shared the names of the herbs used in the treatment of *rigoni,* though some were reluctant to disclose clearly the specific uses of the herbs. Few THPs and IKHs mentioned the plant species unaware that they were disclosing it, and they later said that they would disclose the specifics of the plant species only in a face-to-face interview, or they explained that disclosing the names of herbs was prohibited by their practice. The common plants and animal species used by THPs to treat *rigoni* for both the mother and the infant are: *murumelela (Pleuristylia capensis), mutanzwa (Ximenia caffra), mupalakhwali (Albizia brevifolia), musalamarubini (Withania somnifera), murundelatshotshi (Crotalaria), mpeta (Osyris lanceolata Hochst & Steud) and mulivhadza (Lannea schweinfurthii) (Table 4.4)*. Some of the THPs and IKHs added *(goni*) hawk bird, *(nkolombyani)* lizard and the *(xidorhwani)* small prickly-pear. These indigenous herbal species are used in combination with the excised tissue or worms from the maternal vaginal wall to form the

concoction that will be used by both the mother and the infant as the cure for *rigoni*. All the medicinal herbs mentioned above were named by THPs and IKHs for the treatment and management of the same illness, *rigoni*, in both the mother and the infant.

Musalamarubini, nkolombyani, goni, mualigatsibi, tshitoni, tshibode, and tshiphandwa herbal plants' uses were not clearly explained by the THPs. When THPs were probed for clarification, some of them were reluctant to disclose the uses of these herbs, citing that disclosing the names of herbs was prohibited by their indigenous African practice and their ancestors, as they were sacred medicines. The specific use of these herbs was believed to be sacred knowledge and could not be shared with anyone who was not a THP or in training, although some of the THPs promised to share the information with the researcher on a face-to-face basis and the promise was met during the follow-up meetings.

These herbal plants are used for general purposes including: basic medication in new-born infants; prevention from sorcery and evil doers; the creation of good luck; warding off evil spirits and illnesses; and preventing infections. The herbal plants are also used for the promotion of peace and forgetfulness after someone has suffered from an illness; as an indigenous prophylactic; and for the treatment of infant illness and their symptoms (diarrhoea, fever, stomach pains, dysentery, and sunken fontanel). Clarity on the indigenous medicinal plants / animal(s) used in the treatment of *rigoni* is given in the table below (Table 4.4).

Table 4.4: Some selected Indigenous medicinal plants and animals used in Vhembe district by THPs and IKHs for healing of *rigoni*

Family	Botanical names	Vernacular names	Part mostly used	Specific use for *rigoni*
Birds	*Polemaetus bellicosus*	*Goni*	Whole body	Not specified by THPs
Santalaceae	*Osyris lanceolata Hochst & Steud*	*Mpeta*	Root, bark	Discourages evildoers, for luck and peace
Papilionaceae	*Indigofera arrecta*	*Mualigatsibi*	Roots	Treat diarrhoea and sunken fontanel
Mimosaceae	*Albizia brevifolia*	*Mupalakhwali*	Root, bark, fruit and leaves	Base for infant medicine and abdominal pains
Celastraceae	*Pleuristylia capensis*	*Murumelela*	Stem and root bark	Send away / ward off illness
Papilionaceae	*Crotalaria*	*Murundelatshotshi*	Roots	Alleviate all stomach problems
Solanaceae	*Withania somnifera*	*Musalamarubini*	Roots	Fever, diarrhoea and gonorrhoea
Olacaceae	*Ximenia caffra*	*Mutanzwa*	Roots bark	Remedy for diarrhoea / dysentery
Reptilian	*Tupinambis teguixin*	*Nkolombyani*	Whole body	Not specified by THPs
Reptilian	*Kinixys spp*	*Tshibode*	Bones	Bone setting to diagnose *rigoni*
Celastraceae	*Maytenus senegalensis*	*Tshiphandwa*	Roots and stem	Prophylactic against *tshilala*
Asteraceae	*Dicoma zeyheri Sond.*	*Tshitoni*	Flower and fruit	Fight against infection in women
Anacardiaceae	*Lannea schweinfurthii*	*Mulivhadza*	Root bark	Promote forgetfulness and protection of body of infant
Cactaceae	*Opuntia ficus-indica*	*Xidorwhani / mudoro*	Flower, fruit and stem	Nutrient supplement of vitamin C and scavenging of illness Treat toothache in adults

Category 7: Risks of untreated *rigoni*

Risks of untreated *rigoni* are not part of the IK healing. The risks occur only when the infant is not taken to the THPs and IKHs for indigenous management. Illnesses that are not diagnosed and treated may lead to many risks for the life of women and children. The undiagnosed or untreated *rigoni* may become fatal for both the mother and the infant. In this study maternal and infant risks were repeatedly mentioned by the participants as the outcome of untreated / undiagnosed *rigoni.*

Maternal risks

Maternal mortality is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to the pregnancy and not from accidental or incidental causes. Participants in this study disputed that the risks of untreated *rigoni* in indigenous communities result in repeated abortions. Repeated abortions may have further complications that lead to maternal death from severe bleeding, sepsis and shock.

The participants blamed men for their untreated illness that infects women during intimacy. THP2 asserted that the failure of men to seek treatment when they are sick exposes women to many risks, including abortion and infertility. She further stated that men transmit the illness to different women due to their polygamous status, which is encouraged by the indigenous society. THP2 said:

When a men puts his 'blood into the woman', it will cause abortion. This occurs mostly on men who do not seek treatment from Vhomaine when they are sick, especially those who have many wives and girlfriends. Isn't it that they say munna u vonala nga vafumakadzi [a man is seen by having wives]? Men transmit the illness from one woman to another, even if vanna [men] does not become sick, they spread the illness. There is no pregnancy that stays with a women suffering from goni, there is no such, I have been in this for many years and I did treat people who struggled to carry the pregnancy until term.

THP3 shared the same sentiments by stating that she had treated many women suffering from *rigoni*. The participant reported that women consult her because they are failing to fall pregnant and, as a result of pressure from the husband and the family to have children, they have to seek help after repeated abortions. THP3 explains:

Nne ndo no thusa [I have assisted] many women who had three, four, five abortions. They came to me crying for a baby. Unfortunately these women come to me alone, but I insist that they fetch their mother-in-law or the husband. I involve the family in this case because it is difficult to treat one person, she won't get healed. Rigoni may present in the mother through repeated abortions. I am able to vofha [literally to tie] the illness, thumbu ya fhara [conceive].

THP6 supported other THPs by elaborating that untreated *rigoni* causes women to abort babies and later to struggle to conceive, without knowing the cause of the problem. The failure to conceive may be due to blocked fallopian tubes from infections. THPs and IKHs strongly believe that *rigoni* knocks the baby inside the uterus, resulting in abortions. THP6 said:

There is the time where the mother will be pregnant for say… six months, or seven months, or three months. The rigoni 'hits' or knocks the infant internally, then the mother abort, do you hear me! The mothers abort because rigoni hit the infant inside. Rigoni is in the womb of the mother, so there is no baby that will survive until the mother becomes clever and sick traditional help from Vhomaine.

Other THPs and IKHs further clarified that women who experience repeated abortions may die if they do not seek traditional help. The researcher, from the Western perspective, is of the view that the possible cause of death from repeated abortions is due to severe bleeding, septicaemia and shock. THP14 explains:

As a male you engage with a woman, while you have rigoni and the woman dies. You marry another one, and she also dies, you marry the third one and also die, because of rigoni in males.

THP5 also said:

Rigoni hit the woman strongly. It is very powerful. You can marry up to three women, but they all die due to the infection. Even six married women by you the male suffering from rigoni can die due to rigoni.

THP7 presented a different view of *rigoni* by stating that women may have internal rigoni which knocks the baby inside, resulting in abortion. The woman may be pregnant for seven months, but abort before the ninth month as a result of internal *rigoni.* THP7 explains:

There is an internal rigoni… [rigoni lero bela endzeni]. The mother can be seven months pregnant and she aborts. The woman may think that she is bewitched, but when she consult me I will tell her that she has a diseases, that is the one causing abortions, not witches. Rigoni is located in the womb because the womb carries the baby, which is why the abortion, and the mother bleeds, some bleed to death if they become secretive.

Termination of pregnancy may be due to the internal type of *rigoni* as alluded to by THP7. This is the type of *rigoni* that attacks the foetus in utero because of an infection that the mother may have acquired during sexual intercourse with the infected male partner. The woman may have repeated abortions without realising that the health challenge is *rigoni*. The undiagnosed and untreated *rigoni* may increase maternal mortality, while the men remain the carrier.

Infant risks

The direct risk of untreated *rigoni* in infants is an increase in infant mortality rate. Infant mortality refers to the death of infants between 28 days and 12 months of age. The foetus may develop to full term and be exposed to *rigoni* during normal vaginal birth. The illness *rigoni*, as indicated by THPs and IKHs, knocks the infant during its passage through the vaginal canal, resulting in red marks on the occiput, neck, spinal area or armpits. *Rigoni* might knock the infant while inside the uterus and the infant might survive the knock. Immediately after delivery, however, the infant may present with the danger signs of *rigoni* and urgent traditional health care must be sought to save the life of the infant.

Knowledgeable and experienced indigenous elderly women physically assess the new born immediately after birth to confirm the health status of both the mother and the infant. Participants explained the risks of untreated *rigoni* on the infant from the uterus to immediately after birth.

The major risks that were indicated by THPs and IKHs in infants are dehydration resulting from diarrhoea and death. Infants suffering from diarrhoea become dehydrated, become inactive, deteriorate in health status, and ultimately die, increasing infant mortality. One death of a newborn infant is one too many. One THP *said:*

Tshikhuwa tshi vulaya vana! [Biomedicine kills infants] due to misunderstanding and lack of knowledge on indigenous illnesses such as goni. The infant dies if there are no people with knowledge to look at the infant immediately after birth, and you will see the baby passing very loose watery stools. Within two to three days when you check hafha kha ngoma [anterior fontanel] you will see that ho bodeya [with sort of a dent, referring to sunken fontanel]. If you do not become clever n'wana u ya tuwa [the infant is 'leaving' – dying].

THP4 emphasised that the baby may be lost while still inside the uterus as a result of the presence of 'worms' *[rigoni]* or the baby will be knocked during the exit from the birth canal. The failure to diagnose and treat *rigoni* in the mother affects the foetus inside and the infant externally because every time the mother has a pregnancy, *rigoni* will harm the foetus and the foetus will be aborted. Sometimes the foetus survives the internal risk of *rigoni*, is exposed to *rigoni* during birth, and then dies on the mother's lap. THP4 explains:

Worms kill if not removed, zwi a vulaha. …10, 11, 12 [zwivhungu] worms… Yes….there is one goni which kills inside [in utero] or kill from outside [khokhonya n'wana]… hava na thumbu la khokhonya … thumbu la khokhonya. The infant can be born and to those who does not know may think the baby is healthy, the baby plays well and likes to sleep too much, gains weight [vuleme ha nwana], and without any signs the baby does not breath. When you check the baby you find that muya wo tuwa [the baby is dead].

Participants also argued that the main reasons parents lose their baby at an early stage are: lack of knowledge; ignorance of cultural practices; and not involving elders during pregnancy and birth, which results in undiagnosed illnesses such as *rigoni*. Lack of experience and knowledge of indigenous illness makes the parents or healers look for *rigoni* on one part of the body, the back of the neck, and forget about other areas. THP12 explained how she examines the baby to ensure that she does not misdiagnose the illness:

Rigoni is not only seen on the neck. You may misdiagnose rigoni and lose the infant. I examine the baby thoroughly to make sure that I do not miss the illness. It is very dangerous for the babies, it kills within seconds.

The maternal *rigoni* may hit or knock the infant while passing via the vagina passage externally as explained in category 6.1 [maternal risks] above. Some parents and family members sometimes misdiagnose the illness or ignore the signs and symptoms, resulting in the loss of

the infant. The misdiagnosis of the illness may be due to inexperience in the family, lack of interest in traditional practices, and ignorance. The other risk of untreated or undiagnosed *rigoni* is abortion.

During the subsequent visit, THPs and IKHs were individually interviewed and the interview was based on the focus group interview data and aimed at understanding the indigenous meaning of *rigoni* and how it is indigenously managed within Vhembe district. Theoretical sampling continued until no new categories emerged from the data analysis. Theoretical saturation in GT occurs when there are no new properties and dimensions emerging during constant comparison. Theoretical sampling occurs when the researcher seeks and collects related data to elaborate and refine categories in the development of the emerging theory. Theoretical sampling was carried out in this study to develop properties of each category until the categories were saturated. Saturation of the categories in this study occurred after the fourth subsequent interview visit with THPs and IKHs. (Interpretation and discussion of the results are found in Chapter 5.)

4.4 SUMMARY

This chapter discussed the initial coding of the data. Through line-by-line coding categories emerged. The categories are: the meaning of *rigoni,* origins of *rigoni,* infant as victim, indigenous system assessment, indigenous diagnosis and indigenous healing of *rigoni.* The risks associated with untreated *rigoni* have been explained to provide readers with the outcome of not following the IK healing process. Quotations from the participants were used during the explanation of each category to strengthen the discussion of the subcategories.

The researcher presented a comprehensive overview of the data that was collected and analysed in the research process. The categories and subcategories identified by means of the inductive analysis of the data were used in identifying an abstract concept for analysis through the process of concept analysis (Chapter 6) to assist in the construction of a theory. Chapter 5 provides Interpretation and discussion of the results and the related literature to support the study. Chapter 6 presents the concept analysis that will assist in theory construction.

CHAPTER 5: INTERPRETATION AND DISCUSSION OF RESULTS

5.1 INTRODUCTION

The aim of the study was to develop a substantive grounded theory (GT) that would explain the management of *rigoni* through the indigenous knowledge of THPs and IKHs in Vhembe district, Limpopo Province. Chapter 4 presented findings from and interpretation of initial data analysis to describe the emergence of indigenous knowledge of THPs and IKHs in the management of *rigoni* in Vhembe district. In this chapter, substantive data and relevant literature will be discussed for further illustration of the steps followed to generate the substantive theory. The findings are discussed on the basis of the categories and sub-categories that emerged during the initial data analysis. Literature will be integrated with the findingsThe last section of the chapter provides the conclusion of the whole chapter.

5.2 Discussion of categories and sub-categories

Category 1: Meaning of *rigoni*

The findings revealed that naming of diseases is analogical in nature. The participants indicated that in most cases diseases are identified and categorised according to causes, action and symptoms. An illness is considered a universal human experience and carries cultural meaning and interpretation (Garro 2009:305). Different indigenous groups and cultures recognise illnesses, symptoms and causes differently (Benedict 2014:51) and base their health-seeking behaviour on their cultural understanding of the disease. In this case the naming of the illness *rigoni* relates to the meaning and action of a bird named *rigoni* (hawk) and how it attacks chickens, catches and kills chickens without being seen or recognised by the mother hen. However, on the basis of the THPs and IKHs explanation and my Western training I can classify *rigoni* as vaginal warts or moles. *Rigoni* is viewed as a wart that is embedded in the vaginal canal. *Rigoni* knocks (*khokhonya / gogogo*) the infant hard during its passage through the birth canal. As a result, the infant presents with different symptoms such as red marks, dark blood, burned skin discolouration, on the knocked area. However, participants also stated that *rigoni* might also ascend to the uterine walls where it could cause mother-to-child illness transmission. Traditional health practitioners and indigenous knowledge holders described the analogy of a hawk knocking a baby chick away from the protection

of its mother hen and without its mother hen knowing. This occurrence endangers the life of the mother, resulting in maternal health risks such as vaginal bleeding, and lead to miscarriage.

In indigenous African populations, ethnicity, indigenous cultural practices and beliefs have an influence in the naming of illness and diseases. "Ethno-cultural" refers to a particular culture followed by people of different ethnic groups who have been socialised into that culture and use a unique dialect. Infant illnesses are named according to different indigenous African dialects such as Tshivenda, Sepedi, Xitsonga, IsiZulu, IsiXhosa, Shona etc. *Rigoni* has been named differently by different ethnic and cultural groups of people from different settings. In the South African context, the infant illness of this study is called "*rigoni"*, a Xitsonga dialect in Limpopo Province, and centres on the analogy of the hawk killing baby chicks.

"*Gokhonya"* in Tshivenda relates to how the illness 'knocks' the infant during normal birth. In Sepedi the illness is termed *"thema",* referring to the retracted neck of an infant. *"Ibala"* or *"lebala"* are IsiZulu and SeSotho terms respectively for the red discolouration on the neck and occiput of the infant. In other parts of KwaZulu-Natal the red mark on the occiput and neck are termed *"iplayit"* / *"ipleyit"* because the marks are likened to a plate used for serving food (Sharkey et al. 2013:384). In Ghana the green veins (dark red mark) on the infant are traditionally termed *"asram",* a traditional infant illness believed to be 'not for hospital care' (Bazzano et al. 2008:125). *Asram* in Ghana is believed to be characterised by green/black veins, a big head and the infant growing lean. *Asram* is perceived as not being responsive to hospital medicine, but able to be successfully treated at home with traditional herbal medicine (Okyere, Tawiah-Agyemang, Manu, Deganus, Kirkwood & Hill 2010:322).

Mokgobi (2012:115) adds that another sign of *rigoni (hlogwana*) is the fallen anterior fontanel of the infant. According to de Villiers and Ledwaba (2003:664), infants are considered to be vulnerable to two types of hlogwana: small hlogwana shown by signs of dehydration; and redness on the neck referred to as "big *hlogwana*", supported by retracted neck *(thema*). "*Hlogwana*" is a Sepedi term and literally means "small head". Similarly, in Xitsonga the same phenomenon is termed "*xinhlokwana xa wela*"*,* literally referring to a sunken fontanel. When combined with other symptoms the phenomena are known as "*rigoni"* in Xitsonga and "*gokhonya*" in Tshivenda. *Gokhonya or rigoni* originates from the knocking of the infant by the warts or moles like the hawk knocks and kills baby chicks in a way that is not seen by the mother.

Sign and symptoms related to meaning of *"rigoni"*

Traditional health practitioners and indigenous knowledge holders within the indigenous traditional culture believe that they are able to detect and diagnose infants suffering from *rigoni* through uncontrolled and excessive crying of that infant, accompanied by poor breastfeeding. Similarly, the study conducted in Ghana by Bazzano, Kirkwood, Tawiah-Agyemang, Seth Owusu-Agyei and Adongo (2008:125) revealed that infant illness, such as *asram* (Ghanaian name related to *rigoni* in South Africa), is accompanied by continuous crying and loss of weight. Other signs and symptoms presented by infants suffering from *rigoni* include poor eye contact, tiredness and high body temperature. From a Western perspective, the excessive cry may be due to poor feeding and itchiness on the nape of the neck, occiput and armpits and sometimes even on the buttocks. Poor breastfeeding, diarrhoea and vomiting may result in the infant's weakness, dehydration and malnutrition. Generally, neonates and infants use crying as a form of communication with the caregiver / mother to express a need, even when they are in a healthy state (Amare, Degefie & Mulligan 2012:4).

Infants mostly cry in response to hunger or any discomfort that they feel, as a form of care-seeking practice. However, in indigenous traditional beliefs, when an infant cries excessively and uncontrollably, this type of crying is regarded as an abnormality, as the infant is not comforted by breast feeding to quench hunger. The crying is then interpreted as a way of communication to the parents and grandparents that there are some other health-related problems or illnesses, which may be linked to ancestral worship (Amare, Degefie & Mulligan 2012:4). In certain instances it may be lack of honouring the ancestors or having neglected an elder or that the birth child is a blessing that has pleased the ancestors and they would like to be indigenously informed by performing rituals, African indigenous parents consult THPs and IKHs for assistance when the infant presents with a continuous cry. When a THP has been consulted, she will consult divine traditional bones for assistance from the spirits about the cause of the infant's cry. An ancestral name may be found to be the reason for the continuous cry (Chauke 2015:306).

Chauke (2015) further claims that the name suggested by the THPs may restore peace and happiness for the child and stop it crying. Some cultures and families choose to give their infants names of their ancestors to remind the family of their forefathers (Mandende 2009:83). The naming of infants after their grandparents is a common practice amongst many nations, irrespective of the child being sick or not sick. Naming of an infant is a worldwide cultural practice, but how names are

bestowed differs from society to society and links to the cultural practices and rituals involved for the interpretations attached to such names (Mutunda 2011:16).

Mutunda (2011:18) further argues that naming the infant after its grandparents helps to bring the ancestors closer to the living descendants and to honour the grandparents. Sometimes infants are named to please the angry ancestors who cursed the infant as punishment for failure of the parents to perform rituals after the birth of that infant or the grandparent wants to be revived to honour his / her spirit. The meaning of "*rigoni"* is based on the ethnic cultural interpretation of the traditional beliefs, symptoms and the causes of the illness. The understanding of this aetiology directs the health-seeking behaviour of an indigenous cultural people. The interpretation of the meaning is culturally linked to natural and supernatural causation of the illness, based on disease theory systems.

The significance of the red mark on the occiput

Traditional health practitioners and indigenous knowledge holders make conclusive diagnoses of *rigoni* by linking the presented complaints from the caregiver / mother with reddish marks on the infant's body. The infant may attempt to scratch the itching from the affected area, especially on the occiput, by shaking the head and continuous cries as communication methods to alert the caregiver about the problem. The same reddish marks on the infant's occiput and neck are called "*ibala'* (discolouration) in IsiZulu (Grant et al. 2013:177; Ayibor 2008:29; Bland et al. 2004:120).

A study carried out by Grant, Haskins, Gaede and Horwood (2013:177) relates to bridging the gap between indigenous ways and allopathic ways of treatment and diagnosis of diseases, in KwaZulu-Natal, patients explained that they use both traditional and biomedical healthcare services when they are sick, and that they are directed by the symptoms of the illness. The study contends that for some illnesses such as *ibala* (discolouration), a rash that occurs on the occiput of the infant's head, parents consult traditional healers because it is culturally believed that biomedicine cannot cure this illness. Some biomedical practices refer to the same ibala (discolouration) as "capillary naevus" (Ayibor 2008:29), which is associated with sunken anterior fontanel ("*inyoni"* – IsiZulu word for a bird) that are treated by traditional healers. According to Bland et al. (2004:120), if *inyoni* is not treated, the infant develops a sunken fontanel, diarrhoea and dehydration (Bland et al. 2004:123).

Poor eye contact

Some of the participants in this study alluded to the fact that infants with *rigoni* may also present with poor eye-contact maintenance with the mother. Poor eye contact refers to the failure of an infant to look at the caregivers when they are communicating or playing with him or her. Eye contact, according to biomedical practice, occurs very early in the development of an infant and serves many functions for the growing infant (Carbone, O'Brien, Sweeney-Kerwin & Albert 2013:139). In biomedicine and biomedical practices, infant weakness and fever may be associated with weak muscle tone due to neurodegerative disorders. A weak and unhealthy infant is susceptible to infection because of low resistance to illnesses and the infant may present with fever as a sign of infection. Infants presenting with muscular weakness, poor eye contact and poor sucking should also be suspected of suffering from other medical conditions such as infant botulism, electrolyte disturbance, spinal muscular atrophy, etc. (Waseem, Gernsheimer, Park, Jara & Erickson 2013:97). In indigenous African traditional and cultural beliefs, illnesses might be due to a curse from ancestors or the work of a sorcerer and some supernatural powers (Sodi et al 2013:103).

Diarrhoea accompanied by dehydration

Another symptom associated with the illness *rigoni* is the passing of loose stools – diarrhoea. Diarrhoea refers to the passage of loose or watery stools by infants for a minimum of three times in 24 hours (Yu, Lougee & Murno 2011:5; World Health Organization 2009). From a biomedical perspective, the cause of infant diarrhoea is the rotavirus, irrespective of whether the infant is breast fed or not (Prasetyo, Sabaroedin, Ermaya, & Soenarto 2015:3). Dehydration and weight loss in infants occur and complement one another because they all depend on the feeding method. During a hospital stay by the mother and the infant, the infant is weighed daily to assess the progress of his or her health status (Davanzo, Cannioto, Ronfani, Monasta, & Demarini 2013:47). In indigenous African cultural practices, the elderly women approximate the weight of an infant by carrying him or her on their arms and the infant will be light if *rigoni* is present

Njume and Goduka (2012: 3912) report that in some African countries diarrhoea is believed to be caused by some external forces such as evil spirits, jealous people, or transgression of sexual taboos by the mother. The mother might be feeding the infant with formula milk instead of breastfeeding and be using inappropriate remedies (Netshivhulana, Masevhe, Tshisikhawe & Samie 2014:296); in this way causing diarrhoea and vomiting for the infant. Netshivhulana et al. (2014:295) emphasise in their study that the symptoms of diarrhoea in Vhembe district include weight loss, vomiting, sweating, tiredness and dehydration due to loss of water with the watery stools.

According to Nel (2010:15), diarrhoea and malnutrition in infants have a bi-directional relationship; that is, diarrhoea may lead to malnutrition, while malnutrition worsens the course of diarrhoea. The existence of diarrhoea and malnutrition leads to the infant's loss of body weight, resulting in the infant's generalised body malaise and weakness. The majority of infants with malnutrition tend to have a reduced ability to fight infection, which results in death from common diseases such as respiratory infections and diarrhoeal diseases (Tette, Sifah & Nartey 2015:189). This study revealed that infants suffering from *rigoni* present with diarrhoea, weight loss, weakness, malnutrition, which may be accompanied by dehydration. However, the parents of the sick infant seek health advice from elders in the family or community, who ultimately direct her to consult THPs and IKHs, depending on the indigenous beliefs of the elder consulted.

Category 2: Origins of *rigoni*

Rigoni originates from the parents of the sick infant. The mother is considered the protector of the infant, in the same way as the mother hen protects her chicks from the predatory hawk. The hawk may attempt to go for the kill and the mother spreads her wings wider in a self-sacrificial manner for the safety of her chicks.

Rigoni is transmitted from the mother to the unborn infant either while the foetus is still in the uterus or during the birth process. Indigenous African women are advised by the elders in the family to consult THPs and IKHs to be inspected for illnesses such as *rigoni* and other STIs. This inspection occurs before the women engage in intimacy with their husband. The mother has the responsibility of protecting the innocent infant from internal and external supernatural forces for his or her safety. These forces can be evil spirits, sorcery and any evil activity by bad people who aim to harm the infant. The mother-hen protection as a category is discussed under the following sub-categories: *u tolwa ha muselwa* (examination of the bride), natural incubation and brooding, and hatching / brooding and rearing.

***U tolwa ha muselwa* (examination of the bride)**

Examination of the bride before she engages in sexual activity with her husband is a common practice amongst various culture-bound traditional nations worldwide to test for virginity and the presence of genital illnesses. It is a common traditional practice amongst Zulus to carry out the virginity test for young girls and unmarried women as a prenuptial tradition. The intent of this tradition is to prevent the spread of STIs and to strengthen the moral and cultural practices of the community (Rumsey 2012:1). The same process is followed by the Vavenda and Vatsonga during virginity testing. Other Sub-Saharan African countries that practise virginity testing include Zimbabwe,

Ethiopia, Kenya and South Africa (Thobejane & Mdhluli 2015:12). Thobejane and Mdhluli (2015:12) define virginity testing as the practice and process of inspecting the genitalia of single girls and women to decide if they are sexually active or not.

As a cultural and traditional practice, during the process of virginity testing, the bride is also examined for STIs, which include *rigoni* because the illness is associated with STIs. This process guarantees that the bride marries without illnesses such as *rigoni* and that she is ready for procreation. When the bride is found to be suffering from STIs, she is treated by the THPs or IKHs, who use indigenous traditional herbs until she is cured. The treatment is sought in preparation for her sexual engagement with the husband and to prevent risks of infecting the pregnancy. Ramjee and Daniels (2013:2) support the idea that women are at greater risk of contracting infections than men because of the greater mucosal surface area that is exposed to pathogens and infectious fluid during sexual intercourse.

Natural incubation and brooding

Naturally, women are expected to care for the unborn child by following traditional cultural practices in her marriage. In biomedicine, pregnant women undergo immunisation to protect their health, the health of the foetus, and the health of the infant after birth (Kachikis & Englund 2016:83). Furthermore, Trowsdale and Betz (2006:244) are of the opinion that the mother and foetus depend on the maternal immune system for protection against microorganisms by the maternal antibodies transferred into the uterus and infant post-natally for protection against diseases.

In cultural traditional practices, pregnant mothers are taken to the THPs and IKHs by elders to consult for protection of the pregnancy and the mother's health against sorcerers and witches (Peltzer et al 2009:155). In culturally bound societies, a pregnant woman follows traditional rituals to avoid endangering the foetus and herself. To protect herself and the infant during pregnancy, mothers takes herbal medicines that are believed to prevent maternal complications during the gestational period; such complications include placental problems and abortions. The herbal medicines also promote foetal development (Mugomeri, Chatanga, Seliane & Maibvise 2015:11).

An elderly woman supervises the activities of the pregnant woman and prohibits her from performing activities such as attending funerals, visiting sick family members and sitting on chairs. Otoo, Habib and Ankomah's (2015:42) study revealed that some cultural practices, beliefs and taboos are

exercised to determine the care received by pregnant mothers. These practices are carried out to protect the unborn child, and the mother is given traditional herbs that promote a healthy delivery.

Otoo et al. (2015:42) further explain that most indigenous women use herbal medicines to treat abdominal pain, to induce a smooth delivery, to keep the foetus healthy in the uterus, to keep the infant kicking, as well as to manage vaginal bleeding. As vaginal bleeding may be fatal to both the unborn infant and the mother, the use of herbal medicines that prevent bleeding and keep the baby healthy are vital in African cultures. However, there are foods that are regarded as taboo during pregnancy and also those that are recommended, such as meat, fish, vegetables, beans and fruits to keep the mother healthy during pregnancy, to make the foetus strong and healthy in the uterus and to ensure it gets enough blood. The study by Otoo et al (2015:47) supports the positives of cultural practices by indigenous pregnant women such as the eating of meat, fish, fruits, vegetables, the prevention of strenuous activities, and avoiding the crossing of legs while sitting.

Cultural traditional mothers are socialised by the elders to protect themselves from illnesses that might affect their health and that of the foetus and infant. The mother is guided and mentored into the protective perspective by following cultural rituals and beliefs of the indigenous communities. Elderly females in the traditional family have established good relationships with the community in which she lives, thus it is easy for her to guide the mother to consult a THP or IKH for the performance of ritual while the mother is pregnant. Sarker et al. (2016:8) also refer to the strong relationship the traditional birth attendants and an elderly female, usually the mother-in-law, have with the community as they are the link between the family of the pregnant mother and this community.

Sarker et al. (2016:8) further explain that the mother-in-law mentors her pregnant daughter-in-law in undergoing the same processes and cultural practices that she (mother-in-law) had to undergo. In a study that was conducted in Zambia regarding umbilical cord care, the mother was vested with the responsibility of preparing for birth equipment that would protect the infant from infections. Birth equipment includes a clean razor, gloves, and a cord clamp or tie (Herlihy, Shaikh, Mazimba et al 2013:4). When the mother is pregnant, she is advised to keep herself warm, abstain from cultural taboos that may harm her and the infant, restrict herself to eating certain foods, and is barred from attending other community functions as a precaution. Moreover, the mother is given herbal medicines that are believed to provide protection from natural and supernatural causes of illnesses and diseases.

Hatching / brooding and rearing

"Hatching" refers to the production of baby chicks from eggs that have been placed under the broody hen (Wafadar & Puls 2011:33). Brooding of eggs means sitting on eggs so as to hatch them by the warmth of the brood hen's body. "Rearing" refers to the process of taking care of and raising children in a family. It is the responsibility of both parents, mother and father, to rear children through the protective and traditional male authoritative role. Gaertner, Spinrad, Eisenberg and Greving (2007:964) echo that the maternal and paternal protective attitude plays a role in child rearing.

Once the eggs are hatched, the chicks will have to be reared and looked after for protection from harm. The mother hen ensures her chicks are kept warm until their feathers have grown. Similarly, the mother of the infant ensures that the baby is kept warm all the time to prevent unforeseen circumstances, such as bad weather, a harmful environment, and illnesses. New mothers are assisted in infant care by the elderly female in the family, who guides her on the care of the baby, following cultural, indigenous practices according to the beliefs of that family and its community.

After delivering the infant, the mother and the elderly female (grandmother) take precautionary measures (before the umbilical cord detaches itself from the infant) for safety by restricting the mother inside the home as well as restricting her movements, activities, and other household chores until the cord has fallen off (Herlihy, Shaikh, Mazimba et al 2013:8). Furthermore, as an infant protection during rearing, the infant is not allowed to leave home until the cord has fallen off. Visits to the house by pregnant or menstruating women and the husband are restricted because they are perceived as detrimental to the infant's health and may cause illnesses for the infant (Herlihy, Shaikh, Mazimba et al 2013:8).

THPs and IKHs in this study explained that once the infant is born, the mother takes care and protects him or her from any dangers and any natural or supernatural illnesses. The mother takes care of the baby by providing food, shelter and protecting him or her from bad weather conditions such as rain, cold, and extreme heat (Wafadar & Puls 2011:35). The grandmother assists in cultural natural protection of the infant from evil spirits and evil people, who may visit to harm the baby.

Immediately when the infant is born, the grandmother and or the traditional birth attendant protects the baby from cold by covering her. The family THP is consulted to visit for the performance of traditional rituals, which include the protection of the baby and the mother. Kayombo (2013:1) assert that infants, as the vulnerable population, are given traditional medicines, which are administered

orally, through bathing, or wearing of an amulet on the arm or around the waist to protect them against evil people, witchcraft, and infectious diseases. Kayambo's (2013:3) study further revealed that different traditional methods are used to protect the infant from diseases / illness and these methods include herbal remedies that are administered orally. Incisions are made on the forehead, on the middle of chest, on the abdomen and on the toe, as they are considered to be the targets point for the witches. Some of the THPs and IKHs explained the use of amulets put on the neck, waist or wrist as a protection method from diseases and witchcraft. An amulet is prepared by the knowledgeable family THP, using traditional medicines and is empowered with a charm (Kayombo 2013:2).

In a study conducted in China by Raven, Chen, Tolhurst and Garner (2007:3) on traditional beliefs and practices in the postpartum period, it was found that traditional practices are followed for dietary precautions (eating more food and avoiding cold food), behavioral precautions (staying inside the house, avoiding housework and limiting visitors), and hygienic precautions. In a study by Raven et al. (2007:2) it was revealed that infants are given supplementary feeds like honeysuckle herbs to boost their immunity. These cultural practices in China are believed to facilitate postpartum recovery of the mother, improves her future health, and prevent disease (Raven et al 2007:3). Liu, Petrini, and Maloni (2015:5) state that the rearing and caring of the neonate during the first month of birth is done by the mother in-in-law or the grandmother, while the infant's mother is given a chance to recover and gain strength in preparation for motherhood. This arrangement indicates that the brooding and rearing of the infants is done by the whole family under the guidance of the elders.

This literature supports the study in that the mother continues to protect the infants from external forces by providing nutritious food supplements, warm clothes and following cultural rituals after the birth of the infant. THPs and IKHs in this study emphasised the importance of the postnatal mother to be monitored by an elderly woman (grandmother), confined to the house and restricting people from touching the infant until determined by the family THP after the ritual ceremony of u thusa nwana (ritual ceremony performed by THP and IKH to prepare the infant to be accessible to the entire family and relatives) and the umbilical cord has fallen off (Herlihy, Shaikh, Mazimba et al 2013:8).

Category 3: Infant as victim

The infant is the victim of infectious diseases from the parents. An infectious disease is a disease caused by microorganisms and potentially extremely transmissible to another person by direct or

indirect means or contacts. Pregnant women transmit the infection to the unborn infant during delivery, especially sexually transmitted infections. During the discussion with the participants it became evident that infants who are infected with *rigoni* are the victims of the parents' cross infection. Some of the THPs and IKHs blamed male partners for the transmission of *rigoni* during sexual intercourse with the female. Some infections such as genital herpes simplex virus2 (HSV-2) infections are believed to be undiagnosed thus infected people (males) may infect the sexual partners (females) and not know that they are doing so (Gupta, Warren & Wald 2008:2128). HSV-2 is described as one of the common sexually transmitted infections to call genital ulceration. Some THPs said that *rigoni* is mostly undiagnosed or unseen in men or is visible on the anal area when the men have been thoroughly assessed by the expert and experienced THP.

The infant becomes the susceptible host for the infection carried by the mother, and will be innocently be infected with *rigoni* if the mother does not seek early treatment during her gestational period. The maternal uterus and vaginal wall becomes the suitable environment for the microorganisms that cause *rigoni* to grow well and negatively affect the infant. In Western medicine, it was proved that infants acquire infections through close contact with contaminated fluids or through the placenta and breast milk. Carlson, Norwitz, and Stiller (2010:172) assert that infants acquire infections through close contact (via contaminated blood, urine, and secretions), vertically through trans-placental transmission, and post-natal through breast milk.

As a preventive measure of cross-infection, THPs and IKHs ensure that each mother brings along two razor blades to be used for the excision and incision purposes during the management, treatment and healing of *rigon*i. In Western practice *rigoni* may be associated with Human Papillomavirus (HPV) and anogenital warts. HPV and anogenital warts are found near moist surfaces such as the perianal area, vaginal introitus, vagina, labia and the vulva. They can also be found on dry surfaces such as the shaft of the penis (Gearhart & Chandrasekar 2016:2). The participants in the study alluded to the fact that *rigoni* is associated with sexually transmitted infections, of which some biomedical practitioners liken it to human papillomavirus (HPV) in Western practice as HPV is one of the most common sexually transmitted infections in the world.

It is further claimed that all sexually active people (men and women) in the world have some kind of HPV during their lifetime (Health 24 2016). According to the participants, *rigoni* has been in existence since time immemorial and continues to exist and affect infants because of the cultural and indigenous beliefs that any marriage in the African traditional families is for procreation. Lee et al.

(2013:1) concur that HPV may infect the skin and mucous membrane of the victim asymptomatically. Most types of HPV are asymptomatic and are exclusively transmitted through sexual contact between a man and a woman. Through this sexual contact they may subject the infant to the illness and the infant turns to be the victim of illnesses such as *rigoni,* which is closely related to HPV as it is sexually transmitted by parents.

Vertical transmission of HPV may occur from mother to infants, resulting in infants born with the virus. Though biomedically undiagnosed up to the age of six months the virus is present in the deoxyribonucleic acid (DNA) of the infant (Lee et al 2013:1). Men transmit HPV infection to women, thus contributing highly to the development of HPV-induced benign, premalignant and malignant genital lesions in women. Women become subjected to HPV infection and HPV-associated diseases due to continuous reinfection by their male partners (Feller, Wood, Khammissa, Chikte, Gugushe, Mereov & Lemmer 2010:479). The presence of the infection in the mother acquired from the male partner exposes the infant to similar infections. Based on the explanation of HPV from the literature and the description of *rigoni* by THPs and IKHs, accompanied by my Western trained understanding of the aetiology of any illnesses, HPV and *rigoni* are somehow related, especially in the transmission mode.

Culturally defined illnesses are indigenously diagnosed and healed by THPs and IKHs using indigenous knowledge (Masango 2010:76). If the infant presents with danger signs and is not treated on the basis of indigenous knowledge of THPs and IKHs, help should be sought from knowledgeable family members. These members might refer the parents to seek for indigenous healing from THPs and IKHs. Traditional health practitioners and indigenous knowledge holders use indigenous approaches to make the diagnosis for the sick infant.

Category 4: Indigenous system diagnosis

According to the researcher's understanding, THPs and IKHs make a diagnosis of their client's illness according to their speciality or category or the type of healer they are. This study focused on participants who were diviners, herbalists, diviner-herbalists, as well as IKHs. Some indigenous people are believed to be able to make self-diagnoses regarding indigenous illnesses based on the knowledge acquired during their life span. Such indigenous people then refer themselves to the THPs for assistance.

Diviners (*sangoma* / *mungome* / *mungoma*) are skilful perceptive people who know the secrets of indigenous people. They are knowledgeable about the underworld and possess the ability to see things beyond other people's reach in order to help these people and the community (Shizha & Charema 2011:167). The diviner uses bones and the spirits of the ancestors (the living-dead) to diagnose and prescribe medication for different illnesses and diseases (Mokgobi 2014:29). Diviners are consulted by indigenous people to determine the cause and what or who caused the illness *rigoni*, which may be linked to evil spirits of witches. When the mother of an infant notices that the infant is not well, she consults the elders in the family or any relative with experience about child illnesses. An elderly woman examines the infant and makes a provisional diagnosis before referring the infant to the THP or IKH.

The healer will examine the infant, and if she is a diviner she will consult the ancestors and traditional bones to assist in making the diagnosis. It is a common traditional and indigenous practice that ancestors and traditional bones are consulted, as it is believed that the there is no sickness without the cause and the causer, who aims to be destructive with their evil spirits (Shizha & Charema 2011:169).

The diviners are spiritual specialists who use their divination power to communicate with their ancestral spirits to make a diagnosis for their patients' illness (Sobiecki 2014:2080). Sobiecki (2014:2080) further explains that diviners recommend the appropriate activity for performance of ritual practices or prescribe the herbal medicines to be used for illnesses such as *rigoni*, depending on the diagnosis made. A study done in Nigeria by Sambe, Abanyam and Iorkyaa (2013:21) supported the use of divination by stating that divination is done with the hope of discovering the source of the illness and the appropriate action to be taken for the illness. Diviners and herbalists may dispense herbal medicines for remedial and protective purposes against illnesses and external forces.

According to White (2015:3), in a study conducted in Ghana, the diagnosis of an illness includes establishing the physical cause of the illness and the divination of the spiritual cause of the illness. In some instances, the grandmother accompanying the infant and the mother are questioned to obtain an explanation of the reasons for bringing the infant to the healer regarding the illness.

Herbalists (*inyanga / n'anga / Maine*) are healers who prescribe healing herbal medicines for different illnesses that affect the health of local communities. Gabasiane (2013:87) defines "herbalist" as a person who acquires his or her skills through training from an experienced relative or family member such as a grandfather, uncle, or other individuals and these skills and knowledge are passed on from one generation to another generation verbally. According to Semenya, Maroyi, Potgieter and Erasmus (2013:337), herbalists make herbal medicines out of plant parts, such as roots, bark, whole plants, tubers, bulbs, fruits, leaves, stems and twigs. They (herbalists) have extensive knowledge about the magical qualities of different plant materials, which they prescribe for different diseases, including *rigoni*, in indigenous African infants.

A diviner-herbalist is a person who combines the art of making a diagnosis by means of the traditional bones throwing with that of treating the diagnosed disease with healing herbal medicines (Gabasiane 2013:87). The participants in this study fall in this category of THPs. Diviner-herbalists apply their experience, knowledge and skills to manage the illness *rigoni* in infants and their mothers. Borokini and Lawal's (2014:21) study revealed that when a patient consults a diviner-herbalist, the healer diagnoses the cause of the illness through divination and gives guidance on how to treat and cure the illness. The indigenous system diagnosis can also be done by experienced elders in the community.

Indigenous knowledge is tacit knowledge embedded in community practices, institutions, relationships and rituals, transmitted orally, or through imitation and demonstration (Bray & Els 2007:2). Indigenous knowledge is a body of knowledge built up by a group of indigenous knowledge holders through generations of living in close contact with nature. The United Nations Environment Programme (UNEP) (2008:21) defines indigenous knowledge as a body of knowledge built up by a group of local people in a particular area, through generations of living in close contact with the natural environment. Tacit knowledge is the knowledge that people acquire that cannot be readily available on documents or literature, nor can it be retrieved consciously, but can be displayed only when the person is performing the skill (Bray & Els 2007:2). The female elders within the indigenous communities of Vhembe district in Limpopo are knowledgeable about illnesses that affect infants and are treatable. Where possible they refer the infant's mother to diviner-herbalists. The IKHs who participated in this study explained the diagnosis of *rigoni* through physical examination, observation and questioning of the infant's mother.

Indigenous knowledge holders use their tacit knowledge and skills to manage *rigoni* within their communities. Gupta (2011:58) asserts that individuals in families and communities or well-organised societies develop a knowledge bank that can be used in the future to help others. IKHs rely on observation, listening and physical senses to establish a diagnosis of an infant.

Category 5: Indigenous traditional healing of *rigoni*

"Indigenous traditional healing" refers to the use of herbal medicines and the performance of specific ceremonies and rituals to promote the physical, mental, psychological, social and spiritual well-being of the person (Robbins & Dewar 2011:3). Robbins and Dewar (2011:3) further state that indigenous traditional healing is rooted in the true nature of African culture. The illness *rigoni* is mostly diagnosed immediately postpartum on both the mother and the infant by THPs and IKHs. The management and healing of *rigoni* are focused on the mother as the transmitter of the infection to the susceptible infant. The infant is treated as part of the healing process of managing *rigoni* to prevent its fatal risks. The management of the illness is Africanised and indigenised according to traditional and cultural perspectives.

The practice is determined by the indigenous traditional elders in that community through the support of traditional health practitioners and indigenous knowledge holders. Traditional health practitioners and indigenous knowledge holders provide a culturally accepted healing method, are credible, and have the respect of the people they serve (Bopape, Mothiba & Malema 2013:152). In a study conducted in Malawi by Simwaka, Peltzer and Maluwa-Banda (2007:157) it was revealed that African traditional healers, using indigenous knowledge for the management of illness, understand the patient's cultural beliefs regarding the illness. The concepts of health and illness within the African culture are seen through a social perspective. Traditional health practitioners and indigenous knowledge holders attend to the patient's needs holistically; that is, physically, mentally, psychologically, socially and spiritually (Simwaka et al. 2007:155).

Traditional health practitioners and indigenous knowledge holders have strong cultural beliefs in indigenous traditional healing practices within the indigenous communities they serve. These indigenous traditional healers treat the mothers and infants suffering from *rigoni* through different approaches such as: deworming, herbal padding, herbal bath, incision, smoke inhalation (*u arhavhela*), topical herbal application, and herbal ingestion and wearing of an amulet or a charm. Participants to the study explained that deworming, herbal padding and an herbal bath are used for the healing of the mother. The healing practices for the infant include incisions, *u arhavhela*, topical

herbal application, herbal ingestion and the wearing of a charm on the wrist and waist for protection from external forces.

Maternal healing from *rigoni*

Indigenous traditional mothers seek healthcare for their infant's illness, rather than for themselves from the THPs and IKHs as advised by the indigenous elders in the family to follow a culture-bound practice. Some of the participants (THPs / IKHs) described *rigoni* as worms that are found on the wall of the vagina, that are identified by their dark black head. These 'worms' are excised or removed by the THPs or IKHs using a clean razor blade in the process termed "deworming". Deworming is the giving of an anthelmintic drug to a person to get rid of worms. In this study "deworming" refers to the excisional removal of the vaginal wall embedded with *rigoni* for healing purposes. The excised products are mixed by THPs / IKHs with indigenous herbs to form a traditional herbal medicine to treat the infant and the mother.

Other participants (THPs / IKHs) expressed a different view of *rigoni*, as they narrated *rigoni* as sores and pimples on the maternal vaginal wall. These sores or pimples cause irritation on the wall, forcing the mother to scratch.

Another approach used to heal the mother of *rigoni* is herbal padding. Some THPs and IKHs assert that instead of excising the maternal vaginal wall with the blade, they provide the mother with herbs wrapped in paper or cloth to pad on the vagina when going to sleep. It is culturally believed the herbs will cure the illness overnight, and the mother removes the herbs in the morning in the presence of the healer or grandmother accompanying her. The use of pessaries on the genitalia of women is common practice worldwide for Westernised society and in developing countries. Childbearing women use sanitary pads during the menstrual period and postnatally to control the flow of blood.

Sitting in warm, herb-salted water is one of those practices known by lay people, but Western biomedical practice referred to it as sitz bath, used to clean the sensitive area, bring healing, soothe soreness, prevent infection, relieve pain, reduce swelling, heal tears, and increase blood flow to the areas. Traditional health practitioners and indigenous knowledge holders also prescribe a salt water bath for the mother post-excision of *rigoni* from the vaginal wall as part of the indigenous traditional and cultural healing of *rigoni.*

It is common practice in many countries that still believe and practise their indigenous cultures, such as China and India, to perform rituals for the postpartum women and her infant as a way of cleansing or protection from illnesses. Similarly, THPs and IKHs in Vhembe district, Limpopo Province narrated

that *rigoni* manifests itself more after the birth of the infant. The mother has to follow indigenous rituals to facilitate the healing of the vaginal passage.

Dennis, Fung, Grigoriadis, Robinson, Romans and Ross (2007:498) are of the opinion that indigenous cultural and traditional women have to undergo postpartum rituals for personal hygiene and physical activity by washing their genitalia with soap and water because they are thought to have been temporarily polluted during childbirth. This opinion supports the current study that the use of a sitz bath to clean the genitalia of women after the excision of *rigoni* is not a unique practice in indigenous people of Vhembe district.

Infant healing from *rigoni*

Culturally and indigenously it is believed that infants contract *rigoni* from the sick mother while she is pregnant or giving birth. Any infant illness that may occur during pregnancy may be regarded as punishment or a curse by angry spirits of the ancestors for disobedience or taboo behaviour and / or a curse from evil people. Therefore, the need exists for traditional healing and care to strengthen the pregnancy and to treat the illnesses by performing indigenous African practices and rituals. Part of the process during the treatment of rigoni is the use of traditional smoke when the herbs and sores or worms excised from the mother are burned. The naked infant is rolled over the smoke of the burning concoctions as part of the management of rigoni. This process, according to the participants, facilitates the prevention of sorcery and for *u thusa* [traditional indigenous immunisation of infant; ritual performance done to prevent the infant from illnesses and sorcery].

The infant is kept naked until the procedure is complete so that the body can absorb the medicine in the form of gas. Shoko's (2007:506) study conducted in Zimbabwe about Karanga traditional medicines and healing revealed that indigenous diseases are treated by the inhalation of smoke, making incisions, and other methods as determined by the diviner. Shoko (2007:506) further explains the different approaches used to extract the illness from the body of the patient by biting with teeth, rubbing, incision and excision, and blowing smoke over the affected parts.

The inhalation process also plays a part in the *u thusa nwana* [traditional indigenous immunisation of the infant], preventing him or her from evil spirits and bewitchment. Some THPs indigenously treat the infant with *rigoni* comprehensively, as they culturally and traditionally believe that the infant may be returned later for *u thusa* [traditional indigenous immunisation] if it was not done while the infant

was suffering from *rigoni.* The smoke of traditional herbs is believed to be harmless to the infant and facilitates the healing of the illness *rigoni*. The burning of herbal medicines such as *dupa* as an indigenous practice post-delivery of the infant was revealed in the study by Mogawana, Mothiba and Malema (2015:7) to inhale smoke to treat infant illnesses. Truter (2007:58) supported the idea of THPs using different approaches and methods for healing of illnesses, including incision and topical application of herbs.

The participants emphasised that incisions made in the infant's body should bleed before the application or rubbing of the herbal medicines (concoction) as an indigenous way of healing rigoni. Traditional health practitioners and indigenous knowledge holders make small incisions into the skin or body part of the infant to be used as a depot for herbal medicine. In indigenous African people of Zimbabwe, an incision is made by the healer to drive away evil spirits sent by witches (Shoko 2007:506). The incisions are commonly made on the head and face, and all over the body (Winkler, Mayer, Ombay, Mathias, Schmutzhard & Jilek-Aall 2010:165).

Some animal products such as gorilla dung and fats are added to the concoction to perform the traditional strengthening of an infant through *u thusa* [traditional indigenous immunisation] for protection from sorcerers and evil spirits. Indigenous people may use the entire animal for medicinal purposes, including: bones, skin, excreta (dung), blood, fats, etc. (Padmanabhan & Sujana 2006:327). Belay states (2015:460) that animals such as monkey, hyena and warthog are used for indigenous culturally defined illnesses (Belay 2015:460). After the ritual has been performed, the mother of the infant takes some medications home that will be used in soft porridge, in bathing, for licking, and for application to the whole body daily.

The traditional herbs used for the healing of *rigoni* in infants may also be used in drinking water. The application of the concoctions is done all over the body, with a special focus on the discoloured parts, the joints and the anterior fontanel of the infant. It is indigenously believed that the application of the concoction on the pulsating fontanel also facilitates its fast hardening.

The use of traditional herbal medicines to harden an infant's fontanel is supported by Towns, Mengue and van Andel (2014:4) from their study of Gabon and Benin mothers who use herbal medicines to bathe the infant and apply paste on the anterior fontanelle to facilitate hardening of the fontanel. Hardening the fontanelle prevents evil spirits having access to the infant through this opening. Towns

et al. (2014:4) further explain that infants suffering from fever and passing of greenish loose stools are treated with herbal massages, herbal enemas, and blood-letting through incisions on the body with a clean razor blade for the application of the herbal medicines into the cuts. These examples indicate that the use of traditional herbal medicines in sick infants is an acceptable cultural practice in some of the Sub-Saharan Africa communities.

The duration of healing of infant illness *rigoni* is not specific, but some healers recommend that the process should take at least four days or until the herbal medication is finished. The infant has to complete the course of the herbal treatment for its effectiveness. This instruction is in line with biomedicine where the user of antibiotics must complete the course for healing to take place successfully (McNulty, Boyle, Nichols, Clappison & Davey 2007:164).

Indigenous people from different localities have different specific knowledge on plant and animal names and their usage (Tolossa et al 2013:3) for the healing of illnesses. The Bedes in Bangladesh (Rahmatullah et al 2011:326) have been practising their own traditional medicinal system for years and there are various names for traditional healers based on their practice methods. The healers use plant species that are consumable in the form of leafy vegetables, tubers, leaves, stems and bulbs. In Ethiopia, healers obtain their remedies from natural substances of plants, animals and minerals (Kassaye, Amberbir, Getachew, & Mussema 2006:127).

Various parts of the indigenous plants are used as medicine by the traditional health practitioners around the world. The traditional health practitioners and indigenous knowledge holders share sacred information with a person they trust and respect, the person they believe will keep confidential information secret to appease and honour their practice. Some THPs and IKHs indicated that it is prohibited by traditional and cultural practice to share the names of plant species used in the treatment of various diseases or illnesses. As the researcher had established strong trust with the THPs/IKHs, they were able to share the information telephonically, although they refused to divulge the specific preparation and the uses of the plants and / or animal products.

A few THPs mentioned the plant species unaware that they were disclosing it, and they later said that they are allowed to disclose the specifics of the plant / animal species only in a face-to-face interview. Other THPs stated that disclosing the specifics was prohibited by their practice, hence the researcher did not include the preparations and areas where these herbal plants may be found in Vhembe district.. The common plants and animal species used by THPs to treat *rigoni* for both the mother and the infant are:

murumelela (Pleuristylia capensis), mutanzwa (Ximenia caffra), mupalakhwali (Albizia brevifolia), musalamarubini (Withania somnifera), murundelatshotshi (Crotalaria), mpeta (Osyris lanceolata Hochst & Steud) and mulivhadza (Lannea schweinfurthii). Some of the THPs added *goni, nkolombyani* (lizard) and the (*xidorhwani*) small prickly-pear. These indigenous herbal species are used in combination with the excised tissue or 'worms' from the maternal vaginal wall to form the concoction that will later be used by the mother and to apply to the infant to *rigoni.*

The use of *musalamarubini, nkolombyani, goni, mualigatsibi, tshitoni, tshibode, and tshiphandwa* herbal plant were not clearly explained by the THPs. When the THPs were probed for clarification, some of them were reluctant to disclose the uses of these herbs.

A literature search was conducted regarding the herbal medicinal plants mentioned by participants. Most of the literature was based on ethnobotanical and ethnobiological studies (Mander, Ntuli, Diederichs & Mavundla 2007:191; Borokini, Ighere, Clement, Ajiboye & Alowonle 2013:6). The literature was not based on the specific illness for the use of medicinal plants by THPs and IKHs. The researcher noted that indigenous African people have knowledge of the medicinal use of plants for curing and healing different illnesses that affect human beings, including infants (Borokini, Ighere, Clement, Ajiboye & Alowonle 2013:6). It is clear from the literature that most of the indigenous plants used for medicinal purposes are fully utilised; that is, all their parts are used (Mander et al. 2007:191). These herbal plants are used for general purposes, including basic medication for the new-born infant, prevention from sorcery and evil doers, creation of good luck, promotion of peace and forgetfulness, warding off evil spirits and illnesses.

Clarity on the indigenous medicinal plants / animals used in the treatment of *rigoni* is given in Table 5.1 below.

Table 5.1: Some Indigenous medicinal plants and animals used by traditional health practitioners and indigenous knowledge holders for the healing of *rigoni*

Family	Botanical names	Vernacular names	Part mostly used	Specific use for *rigoni*
Birds	*Polemaetus bellicosus*	*Goni*	Whole body	Not specified by THPs
Papilionaceae	*Indigofera arrecta*	*Mualigatsibi*	Roots	Treat diarrhoea and sunken fontanel
Mimosaceae	*Albizia brevifolia*	*Mupalakhwali*	Root, bark, fruit and leaves	Base for infant medicine and abdominal pains
Celastraceae	*Pleuristylia capensis*	*Murumelela*	Stem and root bark	Send away or ward off illness
Solanaceae	*Withania somnifera*	*Musalamarubini*	Roots	Fever and diarrhoea
Olacaceae	*Ximenia caffra*	*Mutanzwa*	Roots bark	Remedy for diarrhoea
Reptilian	*Tupinambis teguixin*	*Nkolombyani*	Whole body	Not specified by THPs
Reptilian	*Kinixys spp*	*Tshibode*	Bones	Bone setting to diagnose *rigoni*
Asteraceae	*Dicoma zeyheri Sond.*	*Tshitoni*	Flower and fruit	Fight against infection in women
Anacardiaceae	*Lannea schweinfurthii*	*Mulivhadza*	Root bark	Promotes forgetfulness and protection of body of infant
Cactaceae	*Opuntia ficus-indica*	*Xidorwhani / mudoro*	Flower, fruit and stem	Nutrient supplement of vitamin C and scavenging of illness

Category 6: Risks of untreated *rigoni*

The risks of *rigoni* are believed to be maternal abortion and death for both the mother and the infant. These risks are a result of undiagnosed and untreated illness in both the mother and the infant, increasing maternal and infant mortality. Studies report that some sexually transmitted infections such as gonorrhoea, genital herpes, and syphilis and human immunodeficiency virus (HIV) can be passed from mother to foetus inside the uterus and during delivery when the infant passes through an infected birth canal, as with *rigoni.*

Maternal risks

Illnesses and diseases such as sexually related infections pose major risks for pregnant women and their infants. The major risk posed by untreated *rigoni* for the mother is recurrent abortions. The Royal College of Obstetricians and Gynaecologists (RCOG) Green-top Guideline No. 17 (2011:5) defines an abortion / miscarriage as the spontaneous loss of pregnancy before the 24th week of gestation. Participants in this study indicated that some women fail to have infants because of *rigoni*, which knocks the foetus while inside the uterus and results in repeated abortion. According to biomedical practices, recurrent abortions are the result of infective agents (Green-top Guideline 2011:5), while in indigenous traditional knowledge the repeated abortions are caused by *rigoni* embedded in the maternal uterus.

De Santis et al (2012:1) support the THPs' and IKHs' argument about risks of untreated STIs such as syphilis, which causes foetal death and other congenital abnormalities. Shoko (2007:505) supports abortion with regard to culture by explaining that in Zimbabwe men are culturally bound to prioritise having sexual intercourse with a woman who has had a miscarriage to avoid traditional disease *rubaya* (continual ill-health) because of disregard of traditional practices. The repeated abortions may occur as a result of the woman conceiving within unhygienic sexual practices and without determining the cause of the first abortion.

Dellicour et al. (2013:5) revealed two possible causes of abortion in women as biomedical causes and failure to keep to cultural beliefs and practices. Stress and heredity would be the cause from the point of view of biomedicine, while disregard of taboos while pregnant or being possessed by evil spirits would be the point of view of traditional indigenous healers (Dellicour et al. 2013:5). The participants in the study mentioned that the cause of repeated abortions

was the illness *rigoni*, which supports the literature in biomedicine that abortions are caused by illnesses, although in biomedicine these illnesses are not specified.

Infant risks

An infected mother has the likelihood of transmitting the infections to the unborn foetus, the infant during normal delivery and also during breastfeeding. The maternal body has the responsibility of transferring immune factors to the infant, which process begins while in utero and continues postnatally for the infant to develop a self-protective immune system (Hassiotou, Hepworth, Metzger et al 2013:1).

Singhal and Marfatia (2009:71) reveal that pregnancy's immunologic changes subject the mother to infections that cause morbidity and mortality for the mother and infant. The infant acquires infections transplacentally and perinatally (Singhal & Marfatia 2009:71). One of the infections transmitted from mother to infant are herpes simplex virus (HSV) and STIs. Perinatal infections are caused by microorganisms that can be passed from a mother to her infant during pregnancy or normal delivery (Children's Health 2016). Indigenous traditional people believe that the failure to diagnose or treat *rigoni* results in an increased infant mortality rate.

The discussion set out above leads to consolidating all the subcategories and categories for the emergence of the substantive GT.

5.3 Grounded theory: indigenous knowledge healing of *rigoni* in Vhembe District, Limpopo Province of South Africa

Section 5 reported on the explanation of the findings from the constructivist GT study on the indigenous knowledge of THPs and IKHs in the management of *rigoni* in Vhembe district, Limpopo Province of South Africa. In accordance with GT, concepts were gradually and inductively derived from data, with these concepts consequently being grouped under an increasingly higher order of sub-categories and categories. The relationships between and within these categories and sub-categories in section 5.2 were written in bold to identify them with ease. This approach has been utilised to provide a basis for the development of the substantive theory emerging from the indigenous knowledge of THPs and IKHs in the healing of *rigoni*

5.4 SUMMARY

Chapter 5 discussed the interpretation of the results of the study and integrated these results with the relevant literature. The literature was used to substantiate the study results and on the occasions where the study results had limited support from the literature, the researcher presented an argument for justification. The risks of untreated *rigoni* was included in this chapter to highlight the dangers posed if *rigoni* is not attended to. There was limited knowledge in the literature on the indigenous knowledge of THPs and IKHs on the healing and treatment of *rigoni;* therefore, the discussion tried to close the identified gap by contributing new knowledge. Chapter 6 describes concept analysis "IK healing of *rigoni*" of the study which helped in the development of the theory.

CHAPTER 6 CONCEPT ANALYSIS

6.1 INTRODUCTION

The purpose of this chapter is to analyse the concept "indigenous knowledge (IK) healing of *rigoni"* to enable the researcher, participants (THPs and IKHs) and readers to share the same meaning of this concept. The selected concept consists of a phrase instead of the usual one word selected for many concept analysis studies. The explanation of the process to unearth IK healing will be discussed in this chapter. The use of a phrase as a concept is supported by Fawcett (2012:285) who states that a concept is a label that can be expressed as a word or phrase to summarise the crux of a phenomenon. The researcher selected the phrase "IK healing of *rigoni"* as a concept for analysis as the study is conducted through a lens of indigeneity.

A concept analysis was used to identify the antecedents, attributes or characteristics and consequences of a concept (Fawcett 2012:285) "IK healing of *rigoni*". The theoretical meaning of the concept "IK healing of *rigoni*" was analysed following the process described by Walker and Avant (2011:157) and Chinn and Kramer (2008:192).

6.2 OBJECTIVES

The objectives of this chapter are:

To analyse the concept "IK healing of *rigoni*" following the steps described by Walker and Avant (2011:157) and Chinn and Kramer (2008:192).

To describe the meaning of the concept "IK healing of *rigoni".*

6.3 CONCEPT ANALYSIS PROCESS

Concept analysis was selected as a suitable method during analysis of the concept "IK healing of *rigoni*". Walker and Avant (2011:157) define "concept analysis" as a process of examining the basic elements, attributes and purposes of a concept. It is a formal, linguistic exercise that enables the

description of the defining characteristics or attributes of a concept in a natural setting. “Concept analysis” is defined by Nuopponen (2010:4) as an activity undertaken to clarify concepts, their characteristics and relations to other concepts. Baldwin and Rose (2009:781) define “concept analysis” as a method of enquiry that results in clarification, identification and the meaning of words.

The reasons for choosing concept analysis for substantive theory creation/construction was that the concept in the area of interest is available but is not clear and is unhelpful in developing a theory (Walker & Avant 2011:158). Concept analysis renders very precise theoretical- as well as operational definitions for use in theory creation and research (Walker & Avant 2011:158). Walker and Avant (2011:158) further state that concept analysis is useful in theory development and the development of nursing language.

The meaning of the concept is described following the process of concept analysis (Chinn and Kramer 2008:192; Walker & Avant 2011:160) into the following steps:

Selecting concept(s)

Determining the purpose of the analysis

Identifying all uses of the concept(s)

Determining the defining attributes or characteristics

Identifying or constructing a model case.

Identifying additional cases: related cases

Identifying antecedents and consequences

Defining the empirical referents

6.3.1 Selecting the concept

The researcher selected a concept that was significant, suitable, interesting and reflected the title. The concept “IK healing of *rigoni*” was selected and analysed by the researcher because it is key to the study. Healing was selected as part of the concept “IK healing of *rigoni*” instead of management. On the basis of the concepts that developed during the analysis, it was clear that the term “management” was more related to Western and biomedical descriptive processes. In indigenous knowledge systems, however, the word “healing” is used as THPs and IKHs believe in

comprehensive healing of illnesses rather than management. The researcher followed Walker and Avant's (2011:160) guidance on avoiding terms that can be defined by giving examples, and avoiding selection of "umbrella" terms that are too broad and convey many meanings that could confuse the novice researcher (Walker & Avant 2011:160).

6.3.2 Determining the purpose of analysis

Determining the purpose of concept analysis is the second step of the eight steps (Walker & Avant 2011:161; Chinn & Kramer 2008:195). The purposes of concept analysis were determined by the researcher as follows:

- To clarify and describe the meaning of "IK healing of *rigoni*" by THPs and IKHs through their indigenous knowledge.
- To clarify the basic characteristics, attributes and purposes of the concept "IK healing of *rigoni*" (Walker & Avant 2011:158; Chinn & Kramer 2008:192).
- To develop theoretical definition(s) of the concept "IK healing of *rigoni*" that helped in the development and description the theory.
- To discuss and interpret the results of concept analysis that will assist to create/construct a substantive grounded theory of "IK healing of *rigoni*".

6.3.3 Identifying all uses of the concept(s)

Identifying the uses of the concept is the third step of concept analysis. The researcher utilised all relevant available sources of information and colleagues in academia to identify as many as practical uses of the concept "IK healing of *rigoni*", without limiting the search of the terms to nursing and medical contexts (Walker & Avant 2011:161). The review of the relevant literature helped to support and validate the ultimate choices of the defining attributes (Walker & Avant 2011:161).

Table 6.1: The approach used for literature review

Author(s)	Year	Country	Type of article	Search terms	Inclusion criteria
Concise Oxford English dictionary	2011	United Sates of America		Indigenous* Native* Natural* Innate* Aboriginal*	All studies and articles that deal with issues of IK healing, childhood illnesses
Merriam-Webster dictionary online				Knowledge* Understanding* Comprehension* Mastery* Apprehension* Expertise*	
Concise Oxford English dictionary Encyclopedia and dictionary of medicine, nursing and allied health	2011 2003	United Sates of America United Sates of America		Healing* Repairing* Restoration* Health-giving*	
Lebese	2004	South Africa	Cultural health practices of South African Vatsonga people on the home care of children with measles.	*Rigoni, gokhonya, infant illness, lekone, ibala, ipleyiti*	
Mulaudzi & Makhubela-Nkondo	2006	South Africa	Indigenous healers' beliefs and practices concerning sexually transmitted diseases.		
Bopape, Mothiba & Malema	2013	South Africa	Indigenous practices of THP methods by mothers of children admitted to the Polokwane / Mankweng hospital complex, Limpopo Province, South Africa.		

Figure 6.1 below illustrates the conceptual framework on how sources of information was used for concept analysis.

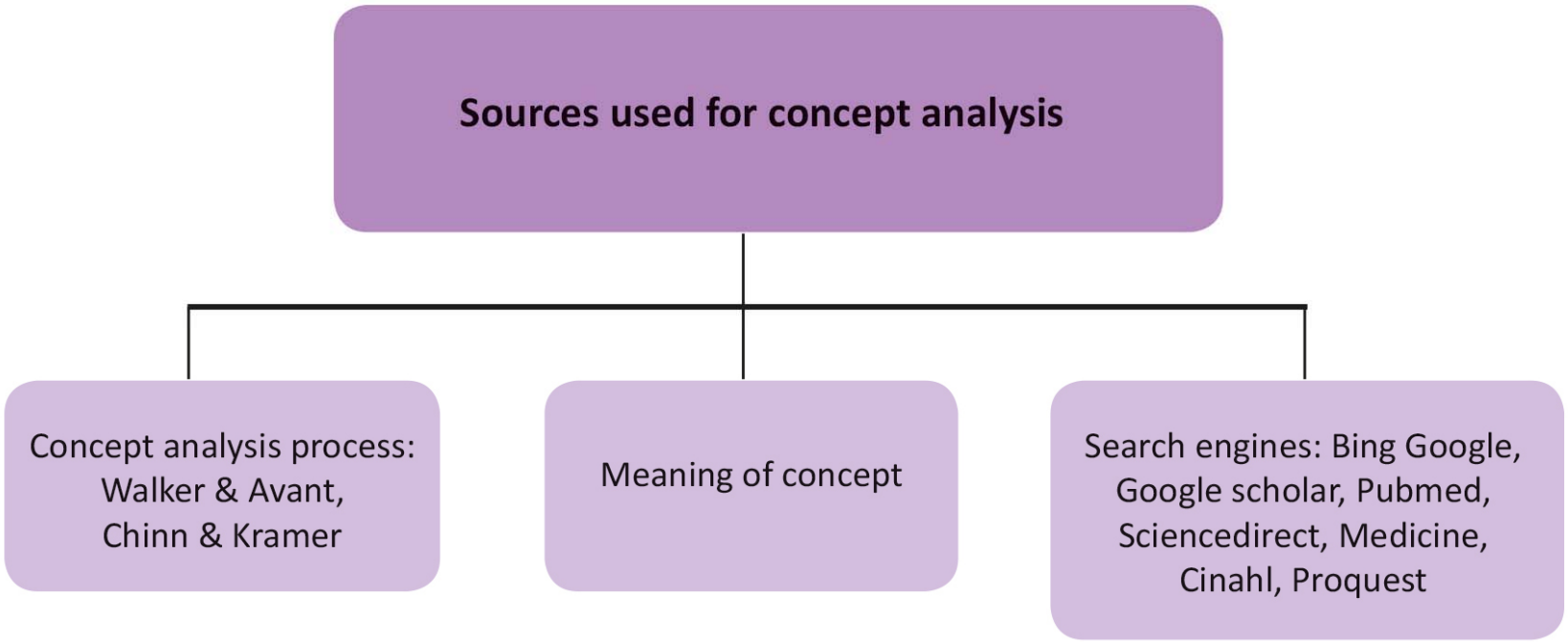

Figure 6.1: Illustration of the Conceptual Framework Showing Sources of Information for Concept Analysis

The concept “IK healing of *rigoni*” has three components: “indigenous”, “knowledge” and “healing”. The uses of the components will be described separately**.**

Indigenous

“Indigenous” is derived from the French word “indigène”, which refers to an indigenous person. If people are indigenous to a country they naturally exist in that place or country rather than arrive from another place.

- Originating in and characteristic of a particular region or country; native.
- Being a member of the original inhabitants of a particular place; of, belonging to, or characteristic of such inhabitants.
- Natural: derived from nature; based on innate moral sense.
- Nature: the phenomena of the physical world collectively, including plants, animals and landscapes, as opposed to human creations.
- The basic or inherent features, qualities, or characters of a person or thing. (Concise Oxford English Dictionary 2011:954).

Synonyms are:

- Native
- Original
- Aboriginal
- Local
- Ethnic
- Ancient
- Initial

The researcher selected the word “native” as it appears first on the list of synonyms to verify if it would provide any different view of “indigenous”. According to the Concise Oxford English Dictionary (2011:953), the explanation or uses of “native” are related to the uses of “indigenous”.

The word “native” from the same dictionary (2011:953) means:

- A person born in a specified place or associated with a place by birth
- A local inhabitant
- Of the indigenous inhabitants of a place
- Person or plant of indigenous origin
- Innate, in a person’s character, inborn, natural, and inherent

In the literature, the concept “indigenous” is used to profile specific people who originate from a particular ancestral place. Indigenous people use collective cultural, and historical practices that emanate from their original locality. Hence, in countries such as Canada, Australia and New Zealand the original people are referred to as Aboriginal, First Nations and Natives (Shahid & Thompson 2009:110). In Southern Africa, including South Africa where the study was based, the original people are believed to be the Khoi San (International Labour Office 1999:3). Native people, as the descendants of the country, are also classified according to ethnicity and culture, for example, the *Inuit* of northern Canada and the *Métis i*n Canada.

Knowledge

According to the online thesaurus “knowledge” refers to”

- Facts, information, and skills acquired through experience or education;
- The theoretical or practical understanding of a subject.

The synonyms of “knowledge”:

- Understanding
- Comprehension
- Grasp
- Grip
- Mastery
- Apprehension
- Expertise
- Skill
- Proficiency
- Capacity

- Capability

Other concepts related to knowledge:

- Awareness
- Consciousness
- Realisation
- Recognition
- Perception

Indigenous / traditional knowledge is defined as an accumulative body of knowledge, practice and belief that is handed down through generations by cultural transmission between indigenous people. (Williams & Hardison 2013:533). In this study, “knowledge” refers to a comprehensive understanding and mastery of the expertise and skills of the indigenous practices acquired through experience.

Healing in the Concise Oxford English Dictionary (2011:657) and the online dictionary is derived from the verb “heal” –

Make or become sound or healthy again. To correct or put right an undesirable situation. The natural process by which the body repairs itself. Bodily function, bodily process, activity - an organic process that takes place in the body;

Convalescence, recuperation, recovery – gradual healing (through rest) after sickness or injury. Gradual return to health and strength after illness. The period needed for returning to health after illness.

Conglutination, union – healing process involving the growing together of the edges of a wound or the growing together of broken bones. To become or cause to become stuck or glued together. To become or cause to become reunited, as bones or tissues. Relating to the abnormal adhering of tissues to one another.

Healing – tending to cure or restore to health. "curative powers of herbal remedies"; "her gentle healing hand"; "remedial surgery"; "a therapeutic agent"; "therapeutic diets".

In Thesaurus: Conglutination – healing process involving the growing together of the edges of a wound or the growing together of broken bones.

Healing – the natural process by which the body repairs itself.

Conglutination – the union of diverse things into one body or form or group; the growing together of parts.

From Encyclopaedia & Dictionary of Medicine, Nursing & Allied Health (2003:779) “healing” refers to:

- The process of returning to health
- The restoration of injured or diseased tissues
- The healing process includes blood clotting, tissue mending, scarring and bone healing.
- The process of helping someone return to health.
- Compassion by health care provider

Synonyms of “healing” (as an adjective):

- Curative
- Remedial
- Therapeutic
- Medicinal
- Restorative
- Soothing
- Health-giving
- Recuperative

“Healing” in the literature is used within the transpersonal realms (Bhika & Glynn 2013:2). Healing is considered to be a journey by literature that entails various processes and cultural practices (Waldram 2013:2). Healing goes beyond the notion of recovery from illnesses as it addresses the

mind (emotional and psychological), body (physical), spiritual elements of the human being (supernatural, ancestors) and environment (social, family, community, fauna and flora) (Bhika & Glynn 2013:3; Robbins & Dewar 2011:3).

The body, mind, emotional and spiritual elements of the human being are all interrelated to accomplish healing as they interconnect with the natural environment. The four realms are used to forge an alliance in healing. The use of healing brings about spiritual revitalisation and renewal of the relationships with the environment (Robbins & Dewar 2011:1).

The concept "healing" will be used in this study to mean correcting or putting right an undesirable situation, to cure and restore health, curative powers of herbal remedies and remedial practices for the "IK healing of *rigoni"*.

Struthers, Eschiti and Patchell (2004:142) describe the concept of "IK healing" as a natural, intact, complex, and comprehensive healthcare system practised by indigenous people worldwide, which is more profound and more deeply rooted and complex than is universally understood. The terms "traditional and "indigenous" are used interchangeably in the literature and are sometimes used together as "traditional indigenous healing" (Struthers et al 2004:143). Therefore, the researcher in this study opted to use them interchangeably as their explanation is similar.

"Traditional healing" refers to the use of herbal remedies as well as specific ceremonies and rituals performed to promote spiritual, mental, physical and psychological well-being of people (Robbins and Dewar 2011:2). Ross's (2010:46) view of traditional healing is similar in that this view involves a comprehensive and all-inclusive integration of mental and spiritual guidance, herbs, diet and physical therapy. The components of this integration are linked to the African science of the beginning and development of the universe.

Based on the above-mentioned uses of the concept "IK healing of *rigoni*", a theory may be created that explains the IK healing of *rigoni* in Vhembe district, Limpopo Province from the concepts: origins, natural setting, local inhabitants, correct, put right undesirable situation (in this case ill infant), use of herbal remedies and herbal surgery, performance of traditional ceremonies and rituals to promote spiritual, mental, physical and psychological wellbeing of people.

6.3.4 Determination of the defining attributes or characteristics

According to Walker and Avant (2011:162), the defining characteristics of a concept make up the core of concept analysis. The defining attributes of the concept are the collection of attributes that are frequently associated with the concept and allow the researcher the widest insight into this concept. While defining the attributes, the researcher makes notes of characteristics of the concept that repeat themselves time and again, thus assisting the researcher to name the occasion of a specific phenomenon as differentiated from another similar and related phenomenon (Walker & Avant 2011:162).

The characteristics of both components of the concept "IK healing of *rigoni*" which appeared repeatedly for "indigenous" were: "native", "origin", "aboriginal", "local", "ethnic", "ancient" and "initial". For "knowledge" the words that are repeated are: "understanding", "comprehension", "grasp", "grip", "mastery", "apprehension", "expertise", "skill", "proficiency", "capacity" and "capability". For "healing" the repeated words were: "curative", "remedial", "restorative", "repairing" and "recovering". The related concepts for "knowledge" are "awareness", "consciousness", "realisation", "recognition", "apprehension", and "perception".

Native: a person born in a specified place or associated with place of birth. Local inhabitant (Concise Oxford English Dictionary 2011:953).

Origin: origin refers to the source or beginning of anything (Encyclopaedia & Dictionary of Medicine, Nursing and Allied Health 2003:1258). Origin refers to the point where something begins or a person's social background or ancestry, in other words existing from the beginning, first or earliest (Concise Oxford English Dictionary 2011:1010).

Aboriginal: means inhabiting or existing in a particular land from the earliest times or from before the arrival of colonists (Concise Oxford English Dictionary 2011:4).

Local: relating or restricted to a particular area or region (Concise Oxford English Dictionary 2011:836).

Ethnic: relating to a population subgroup within a larger or dominant national or cultural group with a common national or cultural tradition (online dictionary), for example, Vhavenda, Vatsonga, Bapedi, etc.

Initial: something or someone existing or occurring at the beginning before others (online dictionary).

Knowledge:

"Knowledge" refers to the comprehensive understanding of the intended meaning of the words or language being spoken or written. The comprehended meaning of the words or language gives the person an expert skills to be performed, such as healing the sick people by THPs and IKHs.

Understanding: comes from the verb "understand". Perceive the intended meaning of words, language or speaker. Interpret or view (something) in a particular way. To know the meaning of (something, such as the words that someone is saying or a language). To know how (something) works or happens. To know how (someone) thinks, feels, or behaves. (Merriam-Webster online dictionary).

Comprehension: it is derived from comprehend. To grasp completely. To understand. To grasp the nature, significance, or meaning (Merriam-Webster online dictionary).

Grasp: To grasp entails snatching and holding something, e.g. words, language or skill firmly for understanding.

Grip: means to grasp tightly and keep a firm hold of something, e.g. words, language or skills (Cambridge English dictionary online).

Mastery: means to absorb and comprehend knowledge or skill in a particular subject or activity, such as traditional healing.

Expertise: expert skill or knowledge in a particular field.

Skill: the ability to do something well. The ability, coming from one's knowledge, practice, aptitude, etc., to do something well. Competent excellence in performance; expertness; dexterity. A craft, trade, or job requiring manual dexterity or special training in which a person has competence and experience (Thesaurus online dictionary).

Proficiency: a high degree of skill. The quality of being adequately or well qualified physically and intellectually. Skilfulness in the command of fundamentals deriving from practice and familiarity (Thesaurus).

Capacity: the maximum amount that something can contain (Merriam-Webster online dictionary).

Capability: the power or ability to do something. The extent of someone's or something's ability (Merriam-Webster online dictionary).

Healing

Curative: cure: the course of treatment of any disease or of a special case. The successful treatment of disease. A system of treating diseases. A medicine effective in treating a disease (Encyclopaedia & dictionary of medicine, nursing and allied health 2003:447). Make healthy again after suffering from a disease or medical condition. End disease or problem by treatment or remedial action. Able to cure disease. Substance, treatment, or remedy that cures a disease, condition or problem. Restoration of health (Concise Oxford English dictionary 2011:351).

Remedial: giving or intended as a remedy or cure. Something or treatment, such as medicine or therapy, that relieves pain, cures disease, or corrects a disorder (online Oxford dictionary).

Restore: restoration: induction of a return to a previous state, as a return to health or replacement of a part to normal position. Filling. Partial or complete reconstruction of a body part (Encyclopaedia & dictionary of medicine, nursing and allied health 2003:1542). The action or process of restoration.

A model or drawing representing the supposed original form of an extinct animal or person (Concise Oxford English dictionary 2011:1226).

Repair: the physical or mechanical restoration of damaged tissues, especially the replacement of damaged or dead cells in a body tissue or organ by healthy new cells (Encyclopaedia & dictionary of medicine, nursing and allied health 2003:1530). To restore something damaged to a good condition. Set right. The action of repairing (Concise Oxford English dictionary 2011:1218).

Recovery: The act, process, duration, or an instance of recovering. A return to a normal or healthy condition.

6.3.5 Identification or construction of a model case

Walker and Avant (2011:163) define a "model case" as an example of the use of the concept that demonstrates all the defining characteristics or attributes of the concept. The researcher had to develop model cases that represented and described a true example of the uses of the concept that included all the critical attributes of that concept (Nuopponen 2010:10). On the basis of the identified uses and the defining attributes of the concept, the theoretical definition of the concept "IK healing of *rigoni"* is a native, original, local and ethnic healing process, in which THPs and IKHs use herbal remedies, and perform traditional ceremonies and rituals for curative, remedial, restorative, repairing and recovery of indigenous people's health within a natural settings, through the application of their comprehensive knowledge, skills, expertise and proficiency of their capacity and capabilities.

The researcher identified an example of a model case of the concept "IK healing" based on the uses, the defined attributes and the theoretical definition of the concept (Chinn & Kramer 2008:195; Walker & Avant 2011:163).

The following model case was constructed in a way that contained all the defining characteristics of IK healing:

A three-week infant cries uncontrollably, refuses breastfeeding, and looks dull. On the 3rd day of the infant's behaviour, the mother-in-law becomes aware that the infant has been crying day and night,

is reluctant to suck the breast, and if he does suck, he vomits. The mother-in-law examines the infant, and notes that there are some red marks on the occipital and neck areas.

The mother-in-law informs the family ancestors by putting snuff on the ground and performing indigenous rituals around the shrine to report the disharmony that is affecting the infant's health. The mother-in-law then takes the infant to the family THP for further healing as it has been considered that the infant might be sick as a result of sorcery from evil people or as a result of punishment from the spiritual ancestors for disharmony in the family and taboos committed by family members. The THP assesses the infant and diagnoses the infant as having rigoni. The chosen THP is believed to perform integrative healing of the mind, the body, and spiritual and emotional elements by using various methods such as herbal medicines, a charm for protection, exorcism, smoke inhalation, herbal ingestion and herbal-water bathing for both the mother and the infant to heal the infant for rigoni. After a week the infant is brought to the THPs for follow up and the infant is healthy and healed from rigoni.

In this case the mother of the infant is emotionally and psychologically exhausted from the behaviour of the infant, who cannot verbalise his problems. She consults an elderly female within her environment for assistance. The elderly female examines the infant and discovers that the infant has some red marks on the skin (neck and occiput). She (elderly woman) performs cultural rituals to communicate with the ancestors about the infant's problems.

6.3.6 Identification of additional cases

Related cases

Related cases are cases that demonstrate ideas that are very similar to the studied concept, are somehow connected to it, but differ when scrutinised closely (Walker & Avant 2011:165). Related cases assist the researcher to understand the fit of the studied concept in the network of concepts that surround it. Related cases help in clarifying the defining characteristics of the concept under analysis and reject what does not define the characteristics of the concept. The characteristics of the concept "IK healing" are presented in the following constructed example:

A mother of the one-month infant shares with her peer friend that her infant does not look active, vomits after meals and is not growing as she expected. The vomiting is accompanied by the passing

of watery stools and her skin feels dry. The peer friend advises her to inform an elderly female relative or her own mother as this may be a serious problem for the infant. The friend is an indigenous, traditional and cultural believer, who is flexible when it comes to health and cultural practices. The mother has been groomed indigenously; unfortunately, she was currently staying with the husband with no elderly woman to mentor her in the upbringing of the infant.

In this case the mother communicates her concerns with someone she trusts about the sick infant. The consultation of a friend is an indication that she has an open mind to accept advice from others she trusts. The friend provides advice on reporting the matter to the family members as protocol in indigenous population is to seek advice from the elders. The absence of an elderly woman in the family confuses the mother on what to do when challenged by a sick infant.

6.3.7 Identification of antecedents and consequences

Identifying antecedents and consequences are the next steps in concept analysis (Walker & Avant 2011:167). The antecedents and consequences were identified from the relevant literature and colleagues knowledgeable about "IK healing of *rigoni".* The knowledgeability included the uses, the defining attributes and the theoretical definition of "IK healing of *rigoni*".

6.3.7.1 Antecedents of "IK Healing"

Antecedent concepts are experiences identified as coming before other concepts (Chinn & Kramer 2008:209).Walker and Avant (2011:167) agree with this definition and add that an antecedent cannot be defined as an attribute of the same concept. Antecedents are the events or characteristics that must arise prior to a concept's occurrence (Brush, Kirk, Gultekin, & Baiardi 2011:163). They are the conditions required for an instance of a concept to occur (Cornally & McCarthy 2011:283). Antecedents were key in helping the researcher to identify underlying assumptions about "IK healing of *rigoni".* The following antecedents were identified: "assessment by family member", "assessment by THPs/IKHs", "indigenous diagnosis" and the "process of healing".

These antecedents have been thoroughly described in earlier chapters of this thesis where the researcher's focus was the necessary antecents of a foetus developing *rigoni.* During the researcher's time with the participants the consequences of healing were also described.

6.3.7.2 Consequences of "IK Healing"

Consequences are those events or incidents that occur as a result of the occurrence of the concept, generally called the "outcomes of the concept" (Walker & Avant 2011:167). Chinn and Kramer (2008:209) are of a similar opinion. Consequences helped the researcher in determining the neglected ideas, variables or relationships that might produce successful new research directions (Walker & Avant 2005:73) in IK healing of *rigoni*. To remind the reader of the many symptomatic consequences of the concept "IK healing of *rigoni"* a full list of consequences is set out here. A controllable or normal infant cry, disappearance of occipital and neck red marks/discoloration and a raised anterior fontanel are consequences of the successful healing process. In addition the infant has good body hydration, is breastfed and retains feeds, develops an extended neck posture and an ability to maintain eye contact with his mother. No vomiting and no diarrhoea occur and the previously visibly sick infant becomes a visibly healthy one.

Table 6.2 below illustrates terms used in the literature search, their attributes, uses, and the antecedents and consequences of the concept "IK healing of *rigoni*".

Table 6.2: Terms, attributes and uses, antecedents and consequences of concept "IK healing of *rigoni*"

Terms	Attributes	Uses	Antecedents	Consequences
Indigenous	Native Origin Aboriginal Local Ethnic Initial	Originating or occurring naturally in a particular place. The source or beginning of anything. A person's social background or ancestry. The basic or inherent features, qualities, or characters of a person or thing.	Assessment by family member Assessment by THPs / IKHs Indigenous diagnosis **PROCESS OF HEALING:** **Maternal:** • Deworming • Herbal vaginal padding • Herbal bath **Infant:** • Incision of affected area • *U arhavhela* (smoke inhalation) • Topical herbal application • Ingestion of herbal mixture • Wrist and waist amulet • Infant worming.	Controllable or normal infant cry Disappearance of occipital and neck red marks / discoloration Raised anterior fontanel Good body hydration Breastfeeding and retains feeds Extended neck posture Maintains eye contact with mother No vomiting and No diarrhoea Healthy infant
Knowledge	Understanding	Facts, information, and skills acquired through experience or education. The theoretical or practical understanding of a subject.		
	Comprehension	Awareness or familiarity gained by experience of a fact or situation. Perception of the intended meaning of words, language or speaker. Interpret or view (something) in a particular way.		
	Grasp	Knowledge of the meaning of (something, such as the words that someone is saying or a language). Grasp the nature, significance, or meaning.		
	Grip	To take and keep a firm hold of; grasp tightly.		
	Mastery	Comprehensive skill in a particular subject or activity. The ability to do something well from personal experience and special skill.		
	Apprehension Expertise Skill Proficiency Capacity Capability	The quality of being adequately or well qualified physically and intellectually. The extent of someone's or something's ability to do.		

Healing	Curative	A medicine or therapy that cures disease or relieves pain. Cure, therapeutic, remedy. treatment, intervention – care provided to improve a situation (especially medical procedures or applications that are intended to relieve illness or injury)		
	Remedial	Giving or intended as a remedy or cure.		
	Restorative	A thing that restores health, strength, or well-being, especially a medicine or drink. The restoration of injured or diseased tissues To correct or put right an undesirable situation. Make good. Make or become sound or healthy again.		
	Repairing	The natural process by which the body repairs itself. The process of returning to health. To become or cause to become reunited. Promoting good health and physical well-being.		
	Recovering	The act, process, duration, or an instance of recovering. A return to a normal or healthy condition.		

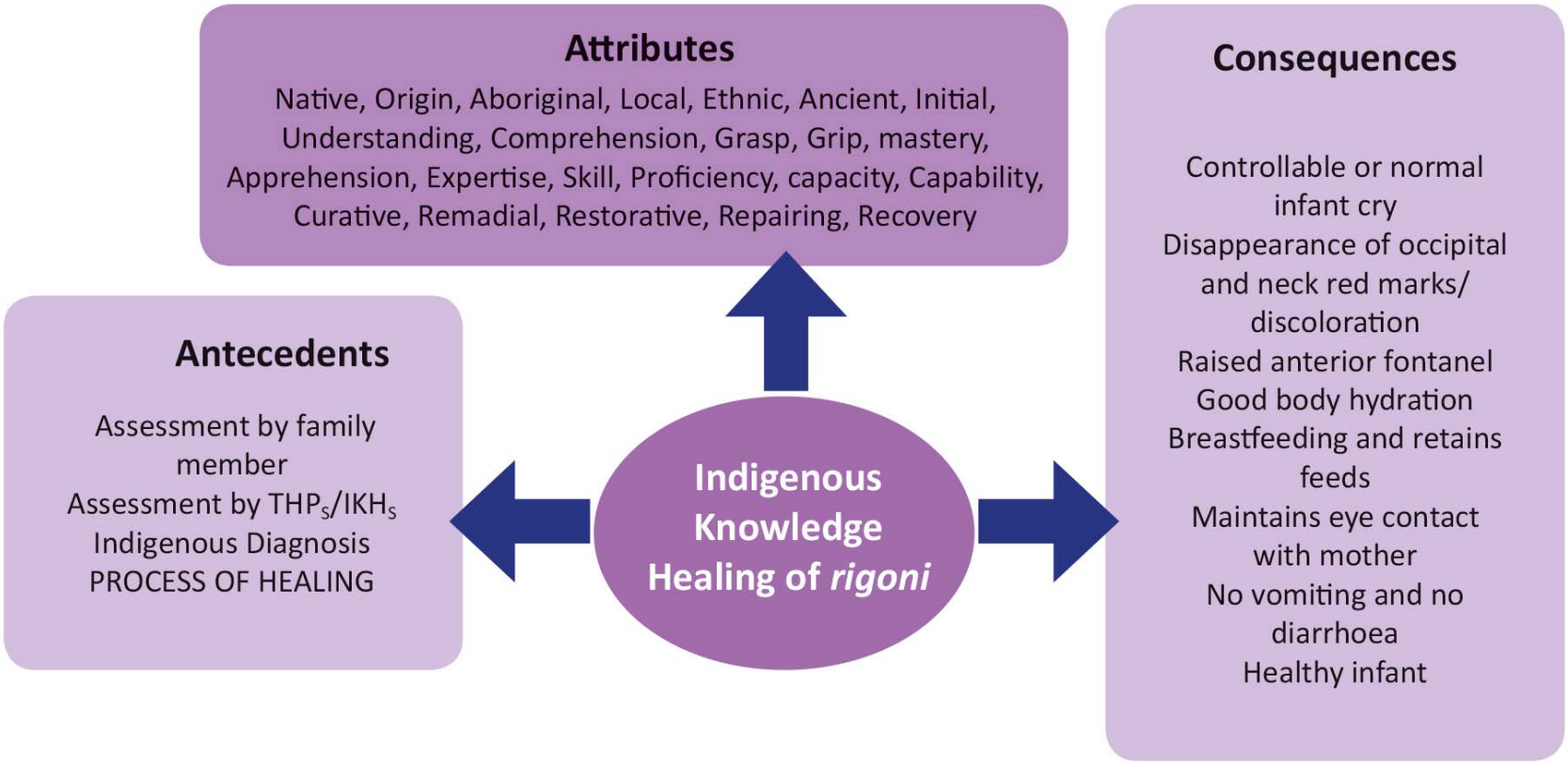

Figure 6.2: Relationship amongst antecedents, attributes or characteristics, and consequences of "IK healing of *rigoni*"

Reduced infant mortality rate

In addition to the "IK healing of *rigoni* as a normal process used by THPs and IKHs, there may be a decrease in the infant mortality rate from unknown causes. The infant mortality rate is the number of infant deaths that occur for every 1000 live births. In Ghana the infant mortality rate was reduced by the use of indigenous herbal medicines to heal illnesses that are believed to be community based, such as *asram* (Okyere et al 2010:322). Infant illnesses such as *asram* prevention and treatments are prescribed by THP or IKH elders who are involved in the care of the infant to reduce fatal complications. Sharkey et al (2012:108) proved that infant mortality rate decreases when indigenous mothers seek indigenous healing timeously for the benefit of the infant.

In the case of South Africa, a reduction in infant mortality rate will assist the country to meet sustainable development goal 3 (SDG3), which replaced millennium development goal 4 (reduce infant mortality). Sustainable development goal 3 aims at ensuring healthy lives and promotion of the wellbeing for all at all ages by 2030 (Osborn, Cutter & Ullah 2015:21). The SDGs plan to ensure healthy lives for all, knowledge, and the inclusion of mothers and infants (United Nations 2014) as the future generation.

Table 6.3: Definitions of indigenous healing

Author(s)	Year	Definition
Struthers, R; Eschiti VS, Patchell, B	2004	Traditional healing / indigenous medicine, Indian medicine, traditional interpretation, and spiritual interpretation. It is an ancient, intact, complex holistic healthcare system practised by indigenous people worldwide that is profound and more deeply rooted and complex than is commonly understood.
Mpofu, E., Peltzer, K. & Bojuwoye, O	2006	Indigenous healing comprises the knowledge and practices used to diagnose, prevent and eliminate/treat physical, mental and social disequilibrium, relying on the practical experiences and observations transmitted orally from generation to generation.
Levers, LL	2006	Ten(10) tenets of indigenous healing: • An interconnectedness exists of the mind, body and spirit; • Healing is based on harmony and equilibrium; • Healing is a sacred process; • Healing is a personal meaning-making process; • A connection exists between the person seeking healing and the healer; • Healing involves multiple interactive processes; • Wellness represents harmony; • Illness represents a disruption of natural balance; • An active relationship exists between the physical and spirit world; • The healer remains an important remedial resource and cultural intermediary.
Robbins, J.A & Dewar,J	2011	Traditional healing is the use of herbal medicines and performance of specific ceremonies and rituals to promote spiritual, mental, physical and psychological well-being. The physical, mental, emotional and spiritual aspects of the human being are all interconnected to maintain a balance or equilibrium
Williams, E, Guenther, J & Arnott, A.	2011	Indigenous / aboriginal healing. It is the holistic use of traditional medicines to maintain harmony within physical, mental, emotional and spiritual aspects of indigenous people within their locality and environment.
Sodi, T, Mudhovodzi, P, Mashamba, T, Radzilani-Makatu, M, Takalani, J & Mabunda, J. (citing Government Gazette 2008)	2013	Indigenous / traditional healing, according to THPs Act no.22 of 2007, refers to the performance of functions, activities, processes or services based on traditional philosophy and beliefs to embrace the utilisation of indigenous remedies.

6.3.8 Definition of empirical referents

Defining of empirical referents is regarded as the last step in concept analysis by Walker and Avant (2011:168). Walker and Avant (2011:168) refer to empirical referents "as classes or categories of actual phenomena that by their existence demonstrate the occurrence of the concept itself and observable elements." The defining features of IK healing of *rigon*i are abstracts; therefore, the need for empirical referents to make the concept measurable (Liu, Avant, Aungsuroch, Zhang & Jiang 2014:72). Empirical referents were identified from the understanding of the participants of this study, THPs and IKHs. Intervening concepts influenced the relationships between antecedents, the process of healing and its consequences. The existence of IK healing is measured in terms of indigenous system assessment, indigenous diagnosis and the process of healing. The formulated theoretical definition of the concept and the identified empirical referents of the concept assist in formulating the operational definition of the concept "IK healing of *rigoni*".

For IK healing of *rigoni* to occur, assessment by a family member, assessment by THPs and IKHs, an indigenous diagnosis and the process of healing should be in place. The antecedents or causes will determine the outcomes or consequences of the healing process of the illness *rigoni*. The consequences of IK healing of *rigoni* were discussed in Section 6.3.7.2.

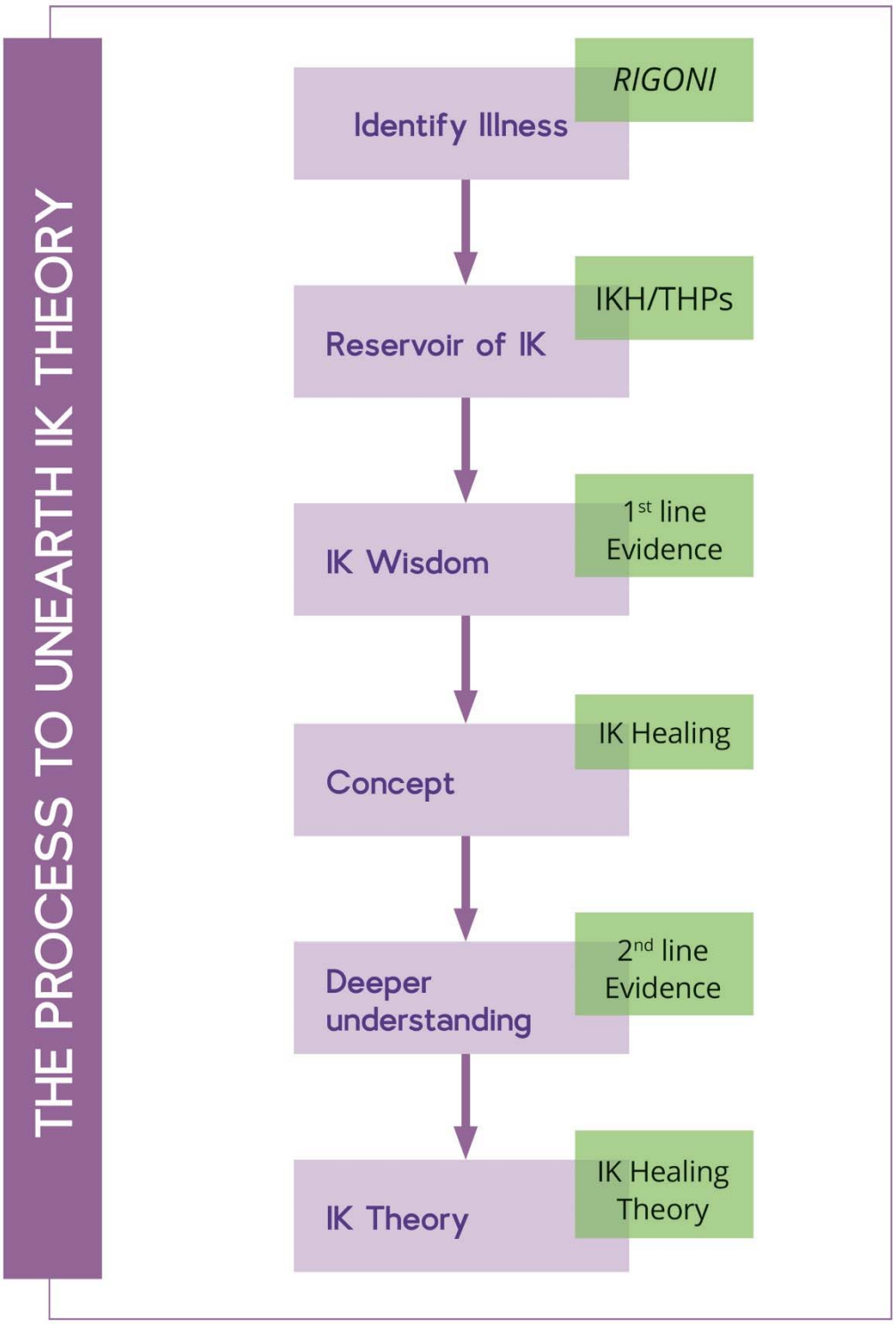

Figure 6.3 The processes followed to unearth the IK healing theory of *rigoni*

6.4 Explanation of the process to unearth IK healing theory of *rigoni* (Figure 6.3 above)

To unearth the process of IK healing theory, the following approaches were utilised: identifying the illness; approaching the reservoir of IK, IK wisdom and concept analysis; developing a deeper understanding of IK healing theory.

6.4.1 Identifying the illness

The infant illness *rigoni* was identified by the THPs and IKHs, but not documented in literature. For this reason, the researcher of this study assisted with the documentation for utilisation in the future by other scholars. The identification of the illness by THPs and IKHs was based on the ethnocultural meaning of the illness, the action of the illness and the presenting signs and symptoms of the illness.

6.4.2 Reservoir of indigenous knowledge

Traditional health practitioners and other community members are considered the reservoirs of indigenous knowledge. The community members who hold indigenous knowledge are called “IKHs” in this study. Traditional health practitioners and “IKHs” are the reservoir of indigenous knowledge about various illnesses and how the illnesses or diseases are healed.

6.4.3 Indigenous knowledge wisdom

Traditional health practitioners and IKHs are the custodians of IK wisdom and understanding of the native, ancient and cultural traditional practices regarding the healing of infant illnesses. The IK wisdom of THPs and IKHs provides first-line evidence of the mastery and skills they possess, although such mastery and skills are not written down. They have the capacity and capability to restore the health of the sick infant through their indigenous knowledge and intelligence.

6.4.4 Concept analysis

The researcher selected the concept “IK healing of *rigoni”* for analysis. The researcher opted for analysis because the concepts in the study were not clear enough to assist in the construction of a theory.

6.4.5 Deeper understanding

The analysis created a deeper understanding of the concept "IK healing of *rigoni*". The deeper understanding was regarded as the second-line evidence during the process of IK healing. Guided by Walker and Avant's (2011:158) eight steps of concept analysis, the researcher was able to formulate a theoretical definition of IK healing, based on its uses, attributes, antecedents and the consequences.

6.4.6 Indigenous knowledge theory of *rigoni*

Indigenous knowledge theory of *rigoni* was unearthed from the concept analysis and supported by the empirical referents and relevant literature. The interconnected relationship between the concepts, the uses, attributes, antecedents and the consequences was able to produce an IK healing theory of *rigoni.*

6.5 SUMMARY

Chapter 6 presented a theoretical and practical analysis of the concept "IK healing of *rigoni*". The uses, attributes, antecedents and consequences of the concept were determined and described. The practical perspective was based on the understanding of IK healing of *rigoni* in Vhembe district in the Limpopo Province of South Africa. The chapter included the explanation of the process to unearth IK healing of *rigoni.* Chapter 7 deals with data substantive theory construction regarding IK healing of *rigoni.*

CHAPTER 7: THEORY DEVELOPMENT

7.1 INTRODUCTION

Chapter 6 addressed concept analysis, which is one of the critical phases of theory development. This chapter provides an overview of the construction of a substantive GT of the IK healing theory of *rigoni.* Substantive GT is defined by Charmaz (2014:344) as a theoretical interpretation or explanation of a delineated problem in a particular area. The construction of the theory is based on three sections: Section 1 – meaning of *rigoni*; Section 2 – exploration of the IK healing of *rigoni* by THPs and IKHs; and Section 3 – concept analysis of "IK healing of *rigoni"*.

Concept analysis provided the researcher with a theoretical base for theory development and an understanding of the underlying attributes of the concept "IK healing of *rigoni*", to allow for the construction of the theory by linking the relationships of the concepts. Following the concept analysis of "IK healing of *rigoni"* in Chapter 6, a substantive GT for IK healing of *rigoni* in Vhembe district, Limpopo Province (South Africa) emerged.

The developed substantive GT will be presented in this chapter. A description of the operational definition of the concept "IK healing of *rigoni"*, defining attributes or characteristics of the concept, antecedents and structure of IK healing process are explained to provide information on theory development. The abstract concepts related to the study and the consequences of the healing process will be discussed as part of the development of the theory. The chapter will conclude with a summary.

7.2 THEORY WRITING

A "theory", according to Burns and Grove (2011:228), refers to an integrated set of concepts and statements that present a view of a particular phenomenon and is used to give a description, a prediction and an explanation of that phenomenon. Charmaz (2014:128) defines a "theory" as general propositions of abstract concepts that explain the relationship between these concepts on the basis of the data. A theory is abstract and self-explanatory (Charmaz 2006:133), while for Chinn and Kramer (2008:181) a theory is a collection of ideas, feelings or an explanation of something intentionally planned to achieve a specific purpose. It is a structured, articulated, and systematised arrangement of concepts to describe a phenomenon under study for easy understanding (Silverman,

2005:14). In this study theory writing and description are based on Figure 7.2, which includes study context, categories from data, focused codes, concept analysis, and the elements of substantive GT.

7.2.1 Study context

The study was conducted in the Makhado Municipality in Vhembe district, Limpopo Province of South Africa. The study population were THPs and IKHs who were found to be the experts in the healing of *rigoni*. The context of the study was detailed in Chapter 3 (3.3) of this thesis.

7.2.2 Categories from data

The researcher collected data from THPs and IKHs who were experts in the healing of *rigoni* in Vhembe district. Analysis was done following Charmaz's (2014) initial coding in Chapter 4 (4.2). The following categories emerged during the coding: meaning of *rigoni*, origin of *rigoni*, infant as victim, indigenous system assessment, indigenous diagnosis and indigenous healing process. Details were set out in Chapter 4 (Table 4.3).

7.2.3 Focused codes

After the initial coding process, focused coding was done to focus on what the initial codes meant by making comparisons between these initial codes (Charmaz 2014:140). The codes that emerged during focused coding were: IK and IK healing process. The researcher realised that the two codes (IK and IK healing process) were not enough to assist in the development of a substantive theory; hence a concept was selected for concept analysis (Chapter 6).

7.2.4 Concept analysis

The concept selected for analysis "IK healing of *rigoni*" was explored to examine and analyse its basic elements (Walker & Avant 2011:158). The antecedents, attributes and consequences of IK healing of *rigoni* are detailed in Chapter 6 (in 6.3.7 and Figure 6.2) and Chapter 7 (Figure 7.1). The process of concept analysis, identification of the antecedents and the attributes of IK healing of *rigoni* helped to transpose concepts to the theory. The elements of the theory are IK interpretation of *rigoni,* origin of *rigoni* and IK interventions for *rigoni.*

7.2.5 Description of the theory

In this study, the researcher followed Chinn and Kramer (2008:208) in structuring and contextualising the "IK healing theory of *rigoni*" by:

- Identification and defining the concepts or elements (explained in Chapter 6, 6.2);
- Identifying the assumptions;

- Clarification of the context of the theory;
- Explaining the relationship of concepts or elements.

An overview of the elements, purpose, context and visual structural relationships of the theory, interrelatedness of the elements and the process description of the theory follows in Section 7.2.5.1 to Section 7.2.5.5.

7.2.5.1 Elements of substantive grounded theory

The elements of the core substantive GT for the IK healing process in Vhembe district includes IK interpretation of *rigoni,* origin of *rigon*i and IK interventions.

Indigenous knowledge interpretation of *rigoni*

Indigenous knowledge interpretation of illnesses differs between Western medicine and indigenous traditional practices. In Western medicine the interpretation of an illness comprises the abnormalities in the function or structure of an individual body system. The indigenous knowledge interpretation of the illness *rigoni* is based on *Ubuntu* of the community. The word *Ubuntu* is derived from isiZulu saying: *Umuntu Ngumuntu Ngabantu* [a person is a person because of others] (Moloketi, 2009:243). *Ubuntu* is a humanistic way of life that puts ethics and morals at the forefront.

African people believe that a human being does not live in isolation, but as part of the cosmos that is occupied by animals, plants and inanimate objects. Human beings, animals, plants and inanimate objects are closely related and dependent on each other (Gumo, Gisege, Raballah & Ouma 2012:525). Benedict (2014:51) states that an illness in African indigenous people is caused by sorcery, witchcraft, breach of cultural taboo, supernatural spirit intrusion, ghosts of the dead and acts of the gods. Nortje and Albertyn (2015:24) echoed similar sentiments in their assertion that the interpretation of an illness looks at a combination of natural and supernatural causes, witchcraft and unhappy ancestral spirits.

African indigenous people and ethnic groups interpret the illness *rigoni* according to ethnocultural naming, the action of *rigoni* and the presenting signs and symptoms. For the illness *rigoni* to occur there should be an imbalance amongst the four aspects of *Ubuntu:* people, animals, plants and the cosmos. The attempt by indigenous people to upset the existing harmony of elements of the cosmos, whether intentionally or unintentionally, results in an illness (Benedict 2014:52).

"Ethnoculture" refers to the ethnicity and cultural practices of a particular group or community within the society. Culture affects how an illness varies regarding its onset, presenting signs, symptoms and duration. Illnesses in indigenous communities are identified and named using various words and dialects, according to the cultural beliefs and practices of that community (Awah et al. 2009:4). The naming of the phenomenon central to this study was based on the cultural beliefs of Vhavenda and Vatsonga cultural people, although the literature revealed other indigenous people who name illnesses according to their own cultural beliefs.

All these names typify and symbolise the adversity of *rigoni* as infant illness. These names are used to paint a picture of *rigoni* discourse since time immemorial. Ethnocultural naming of illnesses like *rigoni* serves as an effective didactic vehicle as it is informative and expressive.

Origin of *rigoni*

According to Benedict (2014:53), an illness originates from three factors: natural, supernatural and magical powers. The magical powers are impersonal powers that are indigenously attributed to the practices of herbalists, diviners and fortune tellers who use natural objects, plants and animals for medicine, magic, charms and amulets (Nyabwari & Kagema 2014:10). In this study, the origin of *rigoni* is attributed to natural causes. The infant contracts an illness from the mother during pregnancy and during birth. For this reason, the illness is considered the mother's failure to naturally protect the infant from *rigoni*.

The mother who undergoes pre-pregnancy examination by the family THPs or IKHs does so to exclude sexually related illnesses such as *rigoni.* In Western practices, pre-pregnancy assessments and examinations are performed to exclude chronic illnesses such as hypertension and diabetes mellitus (Campbell, Lynch, Esterman & McDermott 2013:2). In indigenous traditional practices pre-pregnancy examination was termed *u tolwa ha muselwa* (literally meaning examination of the bride) as a traditional cultural practice within the society. Pre-pregnancy examination is not unique to South Africa. China performs pre-marital examination to exclude hereditary illness that might jeopardise pregnancy and parenting abilities (Hesketh 2003:277).

Indigenous African families perform rituals and ceremonies annually to request protection from bad luck and illnesses. Kayambo's (2013:1) study supports this practice by revealing that traditional methods used to protect the infants include oral remedies, bathing remedies, no intimate relations during breastfeeding. In other countries such as Turkey infants are protected from acquiring illnesses by wearing beads on clothes (Çapik & Çapik 2014:266). When the protection measures have failed the family seeks indigenous knowledge interventions from THPs and IKHs.

The researcher deduced that *rigoni* is caused by nature and sex-related activities by the mother. None of the literature mentioned *rigoni* as caused by supernatural or mystical powers. Traditional health practitioners and IKHs who participated in this study alluded to the fact that *rigoni* originates from the mother who transmits it to the infant.

Indigenous knowledge interventions

The methods used as interventions are based on the social, cultural, spiritual backgrounds, the basic knowledge, attitudes and beliefs regarding physical, mental and social well-being and the causation of illness (Shankar, Lavekar, Deb, & Sharma 2012:126). The main purpose of IK interventions is to cure an illness or disease for comprehensive healing of the body and the mind. Indigenous people consult THPs and IKHs because of social acceptability, their (the people's) perceived source of the illness, their confidence and trust in the THPs' healing, the easy accessibility to this healing, and the perceived explanation of illness by THPs or IKHs within the local culture (Audet, Salato, Blevins, Amsalem, Vermund & Gaspar 2013:1).

A timeframe is a specified period of time in which something occurs or is planned to take place. Traditional health practitioners and IKHs believe in a set timeframe for the illness to be cured and healed comprehensively. The infant should be treated and healed within 12 months after birth; that is, at maximum of 12 months of age the infant should have received indigenous treatment from THPs and IKHs.

The IK practices employed during *rigoni* healing include excision of maternal vaginal wall to remove *"rigoni",* maternal herbal padding, selected herbal medicines, mixing of excised *rigoni* and herbs, *arhavhela* (smoke inhalation and steaming) by the infant, infant incision on diseased area, topical application of herbal mixture, oral ingestion of herbal mixture that has been added into the soft porridge for an infant and a maternal herbal bath. The process of healing of *rigoni* includes curative, remedial, restorative and recovery purposes.

Curative

Traditional health practitioners and indigenous knowledge holders cure illnesses such as *rigon*i by means of herbs and bones from plants and animals respectively. Indigenous people consult THPs and IKHs before or after visiting Western medical practice in order to cure the illness. The belief by indigenous people is that an illness needs to be cured comprehensively by attending to the body, the mind and the spiritual aspects of sick people within the environment in which they live.

Remedial

This approach is the use of traditional and indigenous herbs that are prepared for remedying illnesses. Traditional health practitioners and IKHs who are herbalists use their knowledge to remedy the illness from natural resources. Ngarivhume et al. (2015:224) acknowledge the use of about 28 medicinal plants species for the remedying of illnesses such as malaria in Zimbabwe.

Restorative

The remedies aim to restore the health status of an infant. According to Truter (2007:56), one of the objectives of THPs and IKHs in traditional indigenous practices is to restore physical and mental health. Ross (2007:16) supports Truter (2007) by stating that indigenous healing includes the restoration of peace and a state of equilibrium.

Recovery

Recovery from *rigoni* occurs when healing has taken place as part of an IK intervention for *rigoni.* For the infant to recover from *rigoni* and become healthy, THPs and IKHs are consulted by the mother or family member for the healing process. Shah and Pokhrel's (2012:32) study revealed that indigenous people consult THPs for the herbal remedies that help them to recover from the illness. In this study the infant recovers from *rigoni* by the use of herbal remedies as an indigenous approach to heal an illness comprehensively, even though *rigoni* is considered to be caused by nature.

Outcome of indigenous knowledge healing of *rigoni*

"Outcome" means the way the intervention turns out to be, either positive or negative. The outcomes of IK interventions for the infant may be a healed healthy infant, or infant death. Infants who receive indigenous knowledge interventions from THPs and IKHs within 12 months of birth survive the attack by *rigoni* and are healed. Some mothers seek indigenous knowledge healing from the experts (IKHs and THPs) after 12 months, or even within 12 months after birth, but ignore the presenting signs and symptoms, which results in fatal consequences.

The possibility exists that the THP or the IKH may be a traditional birth attendant, who assists the mother during delivery of the infant. This assigned elderly female assesses the infant immediately after birth for any abnormalities and the presence of illnesses that need immediate indigenous interventions.

7.2.5.2 Purpose of the substantive grounded theory

The purpose of this theory was to identify the elements of IK healing of *rigoni* from the perspective of THPs and IKHs as experts in the healing of *rigoni* in Vhembe district. The elements of an IK healing of *rigoni* were:

- Indigenous knowledge interpretation of *rigoni*
- Origin of *rigoni*
- Indigenous knowledge interventions

Indigenous knowledge healing of *rigoni* emerged as the main concept to indicate the IK healing of *rigoni* by THPs and IKHs in Vhembe district.

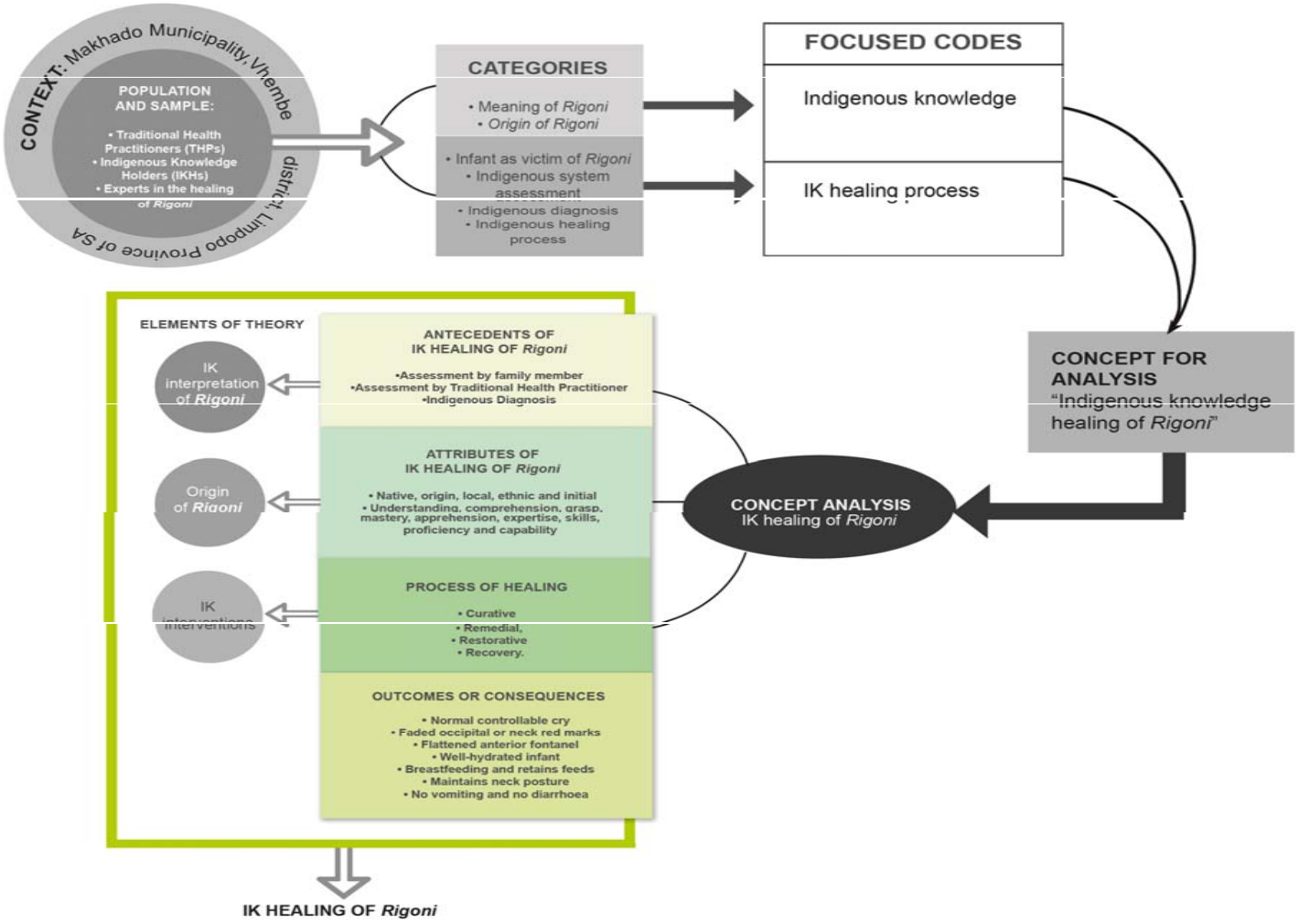

Figure 7.1 A substantive grounded theory: Indigenous Knowledge Healing Theory of *Rigoni*

7.2.5.3 Visual structure of the theory

Corbin and Strauss (2008:127) advocate for the use of diagrams to describe the concepts and their relationships with each other during the study process. Figure 6.3 represents the visual presentation of the process to unearth IK healing theory of *rigoni* in Vhembe district, Limpopo Province, South Africa). The theory "IK healing theory of *rigoni*" is shown in Figure 7.1 to complement and validate the development of this theory. This validation aids in the relationships between concepts, categories and the elements that helped in theory development (Verdinelli & Scagnoli 2013:370).

7.2.5.4 Relational statements

The elements of the theory were examined for their relationships in terms of their meaning by definitions, theoretical validity and consistency in their use throughout the study (Walker & Avant 2011:184). According to Burns and Grove (2011:231), a "relational statement" refers to the declaration that a relationship exists between or amongst concepts. Corbin and Strauss (2008:103) state that development of a theory aims to present the results as a set of interrelated concepts rather than a list of categories from data. Relational statements are abstractions from the substantive data for the construction of reduced data concepts that explain the activities within the study. This process occurs during concept analysis and results in interrelationships between concepts and their elements (Walker & Avant 2011).

Writing concepts by creating a theoretical definition about the relationships between these elements was the base of a GT (Glaser 1978:133). Wuest (2007:259) adds that pure descriptions of data are supported by various quotations and the constant comparisons of incidents that are needed to identify the attributes of the concepts and the theoretical relationships between them. By describing the relations between the concepts and elements found in the study results, it is possible to develop a theory that is grounded in the data.

Indigenous knowledge healing of *rigoni* was the main phenomenon in the healing of *rigoni* by THPs and IKHs in Vhembe district. The six categories discussed in Chapter 4 (4.2.2) linked with the concept analysis in Chapter 6 assisted in theory development. The elements that emerged during concept analysis in Chapter 6 were "IK interpretation", "origin of *rigoni*", "IK interventions" and the "outcome of IK interventions". These elements were linked with the categories in Chapter 4 (Table 4.3), which are: "meaning of *rigoni*", "origin of *rigoni*", "infant as victim", "indigenous system assessment", "indigenous diagnosis" and the "process of healing".

Indigenous knowledge interpretation of *rigoni* has a relationship with the antecedents of IK healing of *rigoni*. The interpretation of *rigoni* is attributed to the assessment performed at home by a family

member, usually an elderly female. The family member or elderly female interprets an illness on the basis of her experience in caring for pregnant mothers and their infants. When an elderly female family member identifies some signs and symptoms of an illness, the infant and the mother are referred to the THPs or IKHs for further assessment. The THP uses her legacy of the ability to heal that has been handed down to her from the previous generation. Western practices uses X-rays, scopes, and send specimens to the laboratory for testing.

The second element of the theory is the origin of *rigon*i. The origin of *rigoni* has its relationship with the attributes of IK healing of this illness. *Rigoni* originates naturally in some human beings who have been sexually active. The meaning given to *rigoni* explains how the name came about; that is, the illness is named after the hawk.

The third element of the theory is IK interventions that are attributed to the healing process of *rigoni*. The interventions are directed at both the mother and the infant. The mother receives deworming (removal of the worms), vaginal herbal padding and a herbal bath as an IK intervention of *rigoni*. The processes that make up the intervention are dealt with in detail in Chapter 4 and Chapter 5 of this thesis.

7.2.5.5 Description of the substantive grounded theory

The process description of a substantive GT for IK healing of *rigoni* as it relates to the Figure 7.1 will be described. The traditional health practitioners and IKHs are utilised for childhood illness, including *rigoni* in the communities. Since the illness *rigoni* is unknown in Western medical practices, mothers of infants suffering from *rigoni* consult THPs or IKHs for assistance. Indigenous knowledge interpretation, origin of *rigoni* and IK interventions for *rigoni* are the three elements for the development of the substantive GT. Indigenous knowledge healing of *rigoni* emerged as the fundamental concept of the study after a thorough concept analysis had been carried out.

Definition of concepts related to theory

Defining concepts in research can be theoretical, conceptual and operational in nature. The researcher will focus only on the theoretical definition, as the study aimed at exploring, describing and theory development and documentation of the IK healing of *rigoni.* According to Corbin and Strauss (2008:25; 279), to theorise refers to actions that are done to develop and create an explanatory pattern that scientifically integrates various concepts through statements and phrases to build the relationships.

Theoretical definitions are abstract and immeasurable statements used to give meaning to the critical defining attributes of the concept in a particular discipline such as the health discipline (Walker & Avant 2005:27). According to Chinn and Kramer (2008:210), theoretical definitions may emerge and be identified and conceptualised as the concepts of a theory. Some of the concepts related to this study have been clarified for the reader's understanding.

Indigenous

This term refers to the aboriginal population of a nation or area who are the first-recorded human inhabitants (Stephens, Porter, Nettleton & Willis 2006:2015). It is the natural origination or occurrence in a particular setting. "Indigenous" describes specific groups of people who are grouped under the criteria of ancestral territory, collective cultural configurations, historical location in relation and knowledge that emanates from long-term residence in a specific place (Waldron 2010:51).

Indigenous healing

This term refers to the health-caring beliefs, views and practices originating within a particular culture or society that are designed to treat the people of that given community (White 2015:1). According to Edwards (2011:336), indigenous healing refers to the local-, time-honoured, traditional-, and cultural ways of indigenous people employing local knowledge to survive.

Indigenous knowledge

"Indigenous knowledge" refers to the large body of traditional / local knowledge and skills acquired during socialisation outside the formal western educational system, embedded within a culture of a particular location or society (Stephens, Porter, Nettleton & Willis 2006:2015).

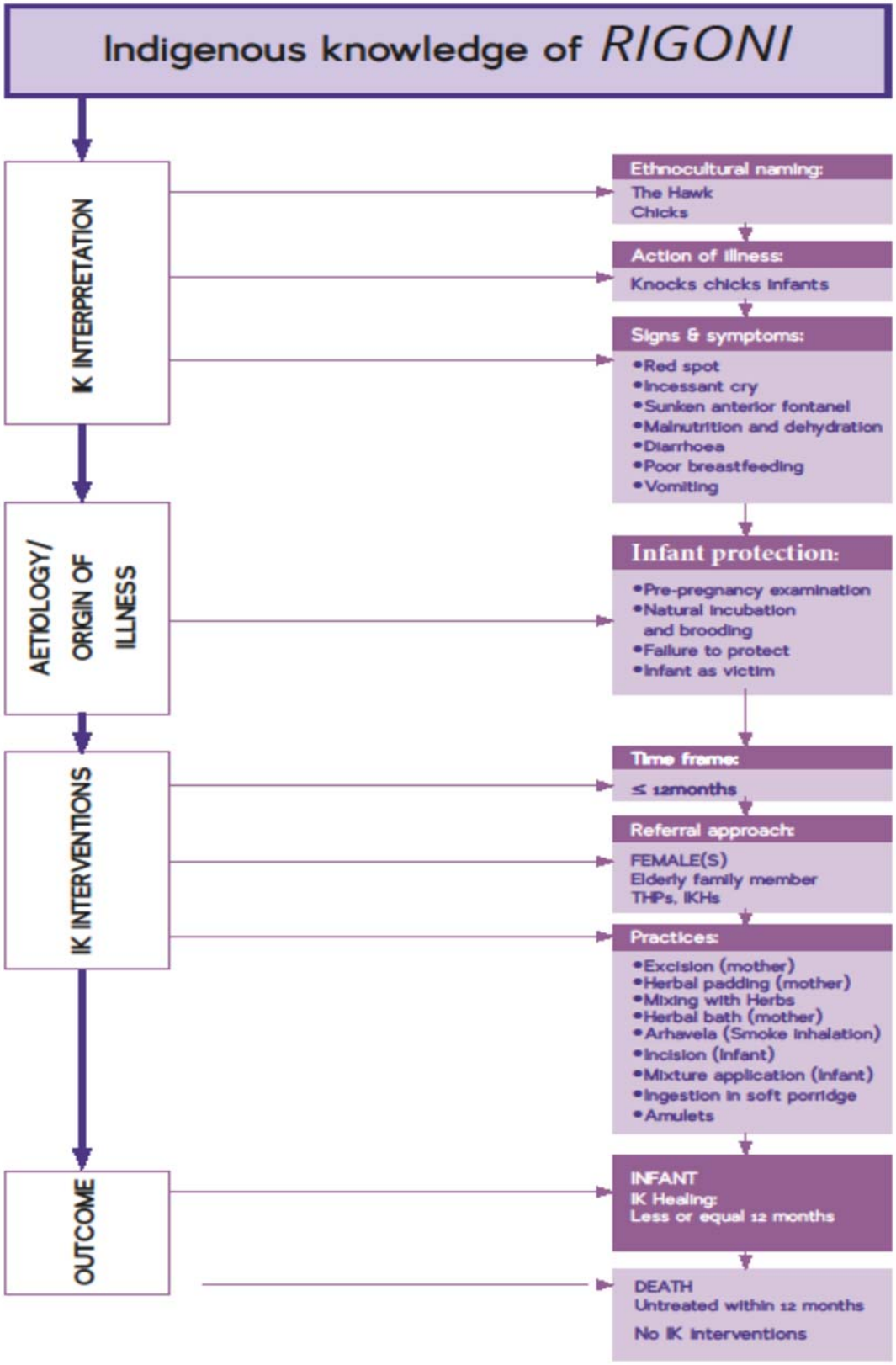

Figure 7.2.: Elements and concepts for IK healing theory of *rigoni*

7.3 VALIDATION OF THE THEORY: INDIGENOUS KNOWLEDGE HEALING THEORY OF *RIGONI*

Indigenous knowledge healing theory of *rigoni* emerged from the interrelationships of the elements (Figure 7.2) IK interpretation of *rigoni*, aetiology or origin of *rigoni,* IK interventions for *rigoni* and the outcome of IK healing of *rigoni*. Validation of the developed theory in this study establishes the ability of the study to capture and reveal indigenous knowledge healing of *rigoni*. Validation reveals that the interpretations that the researcher made from data represents the reality and truthfulness of what the participants narrated. The researcher validated the theory developed from this study by returning to THPs and IKHs to confirm whether what was narrated corresponded to what they practise (indigenous healing practice) in both content and meaning of the concepts. The practice of returning to the participants to validate what the researcher has interpreted from data was called communicative validation (Souza & Silva 2011:779).

The use of *in vivo concepts* was addressed by verifying the meaning of words and phrases with participants through back translation into their own languages (Xitsonga and Tshivenda). The *in vivo concepts* were also supported with excerpts from the interview transcripts. As an example, the concept of *"u tsheya nga ku pangana"* (excision with sharp razor blade*)* popped up continuously in interviews. The researcher verified the clear meaning of the words with the participants and they ratified that the code correctly echoed the accurate meaning of the concept.

An indigenous knowledge healing theory of *rigoni* was developed from the study based on GT and concept analysis, regarding the indigenous knowledge of THPs and IKHs in the healing of *rigoni* (Figure 7.1). The indigenous knowledge healing theory emerged from the data through the integration of concepts and categories. During the return to the participants (THPs and IKHs), the participants judged that the theory correctly explained what happened in their practices.

The categories and the abstract concepts were compared to determine their appropriateness for the developed theory. According to Souza and Silva (2011:782) a well-constructed GT should meet four criteria for judging applicability: fittingness – reality of the theory to fit into the substantive area (Vhembe district in Limpopo Province where indigenous traditional practices are still maintained); comprehension – understandability of the theory by indigenous community; theoretical generalisation – extensive interpretation of the data; and control – with the relationship between the concepts and elements providing a guide for theory development. (See Figure 7.2).

The assurance of fittingness of the IK healing theory of *rigon*i in this study was carried out when the researcher had an initial visit to Vhembe district in Limpopo Province to meet with THPs and IKHs to discuss the topic of the study. During the subsequent interviews, some THPs and IKHs invited the researcher into the hut where indigenous traditional practices are performed. All THPs and IKHs who invited the researcher into their huts live and practise their trade in Vhembe district where the study was conducted. The verifications that took place assisted the researcher in understanding the developed theory for healing of *rigoni*.

To achieve theoretical generalisation the researcher explored concept analysis by selecting the concept "Indigenous knowledge healing of *rigoni*" from the data. The concept analysis approach helped in the development of "IK healing theory of *rigoni*" (Figure 7.1). The indigenous knowledge healing theory of was further validated by ensuring trustworthiness of the study as described in 7.4.

7.4 EVALUATION OF THE THEORY

Trustworthiness is created out of a profound respect for people who participate in the study and their experiences (Munhall 2007:501); meanwhile a qualitative study, like this study, relies mostly on the researcher (Charmaz 2014:15). As part of the evaluation process of the theory, the preliminary results of the study were presented as a poster at the international conference, Sigma Theta Tau International (STTI) conference in Las Vegas in November 2015 for the purposes of peer review and comments. The application of the methods used to enhance trustworthiness of the theory is explained in section 7.4.1 to 7.4.5.

7.4.1 Methodological coherence

The study achieved methodological coherence by integrating the title of the study, presentation of the problem, the literature reviewed, the methodology, the results, and the discussion in a sound logical and structural sense, coherently throughout (Chenail, Duffy, George & Wulff 2009:32). During feedback given to the THPs and IKHs, the word "management" from the title was deemed not to qualify as a term in indigenous practice. The THPs and IKHs agreed with the researcher to apply the word "healing". "Management" was more attributed to Western medical practice, meanwhile "healing" is comprehensive to cover the body, the mind and the spirit of the sick person.

The THPs and IKHs' healing of *rigoni* aimed at reducing infant mortality caused by this illness. The narration provided by the THPs and IKHs when explaining the meaning of *rigoni* and how they heal *rigoni* indicated that there was logic from the title of the study to the methodology. During the literature search the researcher used terms such as "indigenous", "knowledge", "healing" and "*rigoni",*

"gokhonya", or "lekone/thema". The results of the study were tabled (Table 4.3) according to their relationship and similar meaning. The results of concept analysis are also linked to Table 4.3 to ensure the methodological coherence in the study.

7.4.2 Theoretical sampling

Initial sampling was employed to start the process of this study with the participants, who indigenously heal and treat infant illnesses. Initial sampling of the THPs and IKHs helped the researcher to build rapport and a trusting relationship, establish criteria and planning on how data was accessed from these participants (Charmaz 2014:197). Theoretical sampling assisted the researcher with what to focus on in the next data-collection stage. Theoretical sampling involved starting with initial data that was collected during the first interview visit. The researcher constructed tentative ideas and data was examined through memoing and comparison of the collected data for easy refinement of the categories and sub-categories.

The researcher tried to group categories and sub-categories that were similar and related to try and condense these categories for the emergence of a core category. It became difficult to establish the core category as the concepts were not coming out clearly to the researcher during conceptual abstraction to develop a substantive GT. The researcher then opted to utilise concept analysis to explore the concept "IK healing of *rigoni".* The concepts and elements that emerged during concept analysis (Figure 7.1) were indicative of theory development. The concepts IK interpretation of *rigoni*, origin of *rigoni*, IK interventions lead to the successful outcome of IK healing for *rigoni.* The summation of all these concepts generates IK healing theory of *rigoni.*

7.4.3 Concurrent data collection and analysis

Data collection and analysis were done simultaneously in this study. The researcher interviewed three THPs or IKHs per visit to the Vhembe district of Limpopo Province. Immediately after the end of the session, the researcher began to look at the field notes and try to reflect on what the THP or IKH had narrated. A digital recording was listened to and the field notes were looked at to check for what had been missed and added. Concurrent data collection and analysis helped the researcher to know what to ask the next THP or IKH in the interview.

The researcher was kept on his toes to ensure that before leaving the setting for data collection, the data was analysed immediately before he forgot or lost raw data. It is also a requirement in GT to concurrently collect and analyse data to guide for the next interview. The researcher was helped to identify experts in *rigoni* healing by the chairperson of Makhado Traditional Health Practitioners Association. After the initial data collection and analysis theoretical sampling was directed by the

analysis of the data; and the subsequent identification of concepts that needed the researcher to be responsive and seek additional data to feed the process until theoretical saturation was reached (Corbin & Strauss 2008:148). A total of 12 THPs and IKHs participated in this study. A complete discussion of the sampling in this study was provided in Chapter 3, Section 3.4.2.3.

7.4.4 Theoretical development

Theoretical development revealed the meaning the THPs and IKHs ascribed to IK healing of *rigoni* and their understanding of the indigenous practices. To achieve theoretical development, the categories and concepts were verified in the way described in 7.3 and the researcher was also assisted by the supervisors and colleagues at work for an accurate description of the emerging concepts. Concept analysis was used as a way to reveal the concepts that were not clearly coming out (Chapter 6). The IK healing theory of *rigoni* was developed from concept analysis.

7.5 SUMMARY

This chapter presented, at a theoretical level, a GT for IK healing of *rigoni* in Vhembe district, Limpopo Province (South Africa). The meaning of the indigenous healing of *rigoni* by THPs and IKHs was explored and described in relation to the concepts from the perspective of the participants. A close interpretation of the data was carried out for enabling concepts, elements and relationships between these concepts and elements in order to develop a theory for indigenous African and cultural healing of *rigoni* by THPs in Vhembe district, Limpopo Province (South Africa). The chapter synthesised the formulated conclusions into relational elements to describe the theory. A visual presentation of the theory was provided to elaborate on the explanations, followed by a discussion of the theory in terms of its assumptions, purpose, context and structure.

CHAPTER 8: AN OVERVIEW OF RESULTS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS

8.1 INTRODUCTION

The aim of this chapter is to provide an overview summary of the results, list limitations of the study, make recommendations and draw a conclusion. The study limitations are acknowledged and the recommendations from the study are presented in the final section of the chapter. The chapter concludes with the general recommendations of the study.

8.2 OVERVIEW SUMMARY OF RESULTS

8.2.1 First section – Exploring and describing indigenous knowledge of THPs in the healing of *rigoni*

The indigenous knowledge of THPs and IKHs was explored and described regarding the healing of *rigoni* in Vhembe district. A qualitative, exploratory, descriptive and contextual approach was used following GT methodology. Categories and sub-categories were identified during the analysis and were compared with relevant literature (Chapter 4, Table 4.3; Chapter 5, 5.2).

8.2.2 Second section – Analysis and interpretation of results

Data was analysed following Charmaz's (2014) coding process of initial- and focused coding with the aim of obtaining categories and a core category for theory development. During the analysis the researcher noted that it was difficult to clarify some of the key concepts and categories, hence resorted to concept analysis.

8.2.3 Third section – Concept analysis

The purpose of the third section was to analyse the selected concept "IK healing of *rigoni*" from the first section. The concept analysis helped the researcher to understand the indigenous meaning and IK healing of *rigoni* in an indigenous practice. The researcher followed Walker and Avant (2011:157) to analyse the selected concept, "IK healing of *rigoni*". During the concept analysis of "IK healing of *rigoni*" the following results emerged: theoretical definition, antecedents and consequences of the concept (Chapter 6, 6.3.7).

The discussion of the antecedents of IK healing of *rigoni* is on Chapter 6 (6.3.7.1), which include assessment by "family member", "assessment by THPs or IKHs", "indigenous diagnosis" and the

"process of healing". The possible consequences or out of IK healing of *rigoni*, discussed also in Chapter 6 (6.3.7.2) are controllable or normal infant cry, disappearance of occipital and neck red marks/discoloration, raised anterior fontanel, well hydrated infant, breastfeeding and retaining feeds, able to control neck posture, an ability to maintain eye contact with mother, no vomiting and no diarrhoea.

8.2.4 Fourth section – Theory development

The fourth section developed and described an IK healing theory of *rigoni* in Vhembe district. Theory development was based on the results concept analysis in Chapter 6 (6.3).

8.3 THEORY DESCRIPTION

The theory was described based on assumptions, purpose, and theoretical definition, context and the structural relationships of the concepts (7.2.2 of Chapter 7). The purpose of the theory was to explore and describe the indigenous knowledge of THPs and IKHs in the healing of rigoni in Vhembe district.

8.4 LIMITATIONS OF THE STUDY

The following limitations were identified:

- During data analysis the researcher used Charmaz's (2014:124) coding practices of axial and focused coding. The emerged categories and sub-categories did not become clear for the researcher and were not easy to understand for theory development that was grounded in the substantive data. Hence the researcher decided to explore concept analysis as the step which followed to assisting in theory development (Walker & Avant 2011:157).
- The study was conducted in Vhembe district, Makhado municipality in Limpopo Province of South Africa, limiting the results to this context only.
- The participants were members of Makhado Traditional Health Practitioners' Association only, which was formed by THPS and IKHs.
- The setting selected by the participants was not conducive to hygiene. There was only one unclean, door-less pit toilet for all the participants which made it difficult to maintain privacy and respect for adults as a cultural practice.
- Some THPs and IKHs had to be fetched from home along with their great grandchildren. The grandchildren made noise and interrupted the voice of the THP or IKH during the interview by crying or calling the grandmother.

for the grandchildren. They had to be returned home before the school knocked off so that they could prepare lunch for the grandchildren.

- Time constraints presented a challenge as the participants used buses to and from the venue for the meeting with the researcher.
- Some of the limitations may be overcome if the study was conducted at the THPs and IKHs' homes, where they practice to ease the problem of transport. Grandchildren may be sent to orphanage homes where they will be cared for with state resources, without being burden to the elderly.

8.5 RECOMMENDATIONS

The following recommendations originated from the study and will be discussed, as they relate to nursing education and practice, indigenous knowledge practice and research in nursing:

8.4.1 Recommendations for nursing education and practice

- The South African Nursing Council should assist in curriculum development that includes indigenous knowledge of THPs and IKHs for implementation during the training of nurses.
- The South African Nursing Council should recognise the practice of traditional culture in the provision of comprehensive healthcare.
- Reinforce rules, acts and regulations that have been developed to guide and inform policies regarding the collaboration between indigenous health practices and biomedical practices to reduce infant mortality rate from so-called "unknown illnesses".
- Nurse educators and other healthcare professionals should accept and acknowledge the indigenous knowledge healing practice.
- Nurses should be introduced to the importance of indigenous knowledge healing of *rigoni* and other illnesses that are culture-bound in nature.
- A module or a course on indigenous knowledge healing by THPs and IKHs should be introduced into the nursing curricula.
- Platforms should be provided for THPs and IKHs to be engaged in the education of nurses regarding indigenous traditional healing of illnesses.
- Healthcare policies (including the Traditional Health Practitioners Act) should be introduced, encouraged and supported for nurses, which focus on the heath of infants suffering from illnesses considered to be unknown in biomedicine.

8.4.2 Recommendations for indigenous practice

- The findings of the study should be presented to the members of Makhado Traditional Health Practitioners Association in Vhembe district, Makhado municipality in Limpopo Province of

South Africa, in the presence of invited community health nurses and other community healthcare providers.

- An awareness campaign with THPs and IKHs should be planned for the management of unknown illnesses such as *rigoni* to be discussed on different media, including audio, visual and print media.
- An institution should be developed for the training of THPs and IKHs in documenting their tacit knowledge, so that the institution could work for future generation and as a resource centre for indigenous knowledge practices.
- Networks should be established with research institutions (universities) to promote the effectiveness of traditional herbal medicines and investigations of tissues excised from the patient during the healing of *rigoni.*

8.4.3 Recommendations for research in nursing

- A study should be conducted on the views of nurses and other healthcare professionals on traditional indigenous healing practices in comprehensive patient care.
- The perceptions should be investigated of patients in hospitals of traditional indigenous knowledge healing by THPs and IKHs for various illnesses.
- The belief systems of nurses working in rural hospitals in Limpopo Province should be investigated regarding the aetiology of illnesses from the African perspective.
- The practice environment should be investigated of nurses working in rural clinics where infants are delivered by midwives.
- Research should be conducted on the care of the pregnant woman from conception until delivery, combining indigenous knowledge practices and biomedical practices.
- Nurses should conduct research on patients diagnosed with unknown illnesses by biomedical practitioners.
- Open experiments should be conducted on patients treated in traditional practices and biomedical practices for an illness declared unknown, such as cot death in biomedicine.
- Further research needs to be carried out on the testing of the tissue excised by THPs and IKHs in laboratories to determine the illness *rigoni.* Traditional health practitioners and indigenous knowledge holders through the assistance from Department of Science and Technology in South Africa need to have an indigenous laboratory in which tissue investigations are performed and that has a sacred space.

8.4.4 General recommendations

The major recommendation from this study is that the traditional health practices by THPs and IKHs should be integrated within the healthcare system of South Africa to promote the health of the

citizens. Collaboration between traditional health practices and biomedical practices should occur. The indigenous knowledge healing should be integrated into the curricula of healthcare professions to assist them in how to treat traditional people decently, rather than judge their cultural norms, values and beliefs.

8.5 APPRAISAL OF IK HEALING THEORY OF *RIGONI*

IK healing theory of *rigoni* was developed to explain the healing practices of THPs and IKHs in Vhembe district in Limpopo Province of South Africa. Members of the community of practice at the Nursing department (University of Pretoria) were invited for appraisal and consensus on the relevancy of the theory in health and indigenous knowledge systems. The services of the trauma and emergency expert was sought for the pictorial illustration of IK healing theory of *rigoni.* The theory was further presented to the participants (THPs and IKHs) in Vhembe district and they appraised the theory within their practice as acceptable.

8.6 SUMMARY

In conclusion, an overview of the results has been provided, followed by a discussion of the limitations of the study and recommendations for nursing education, indigenous practice and for nursing research as well as general recommendations. A theory has been developed that explores and describes the indigenous knowledge of THPs and IKHs in the healing of *rigoni*. The study provided a better understanding of the indigenous knowledge of THPs and IKHs in the healing of *rigoni* in Vhembe district, Limpopo Province of South Africa.

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ANNEXURE A

Declaration regarding plagiarism

I, S.R Rikhotso, hereby declare that: ***Indigenous knowledge of traditional health practitioners in the management of rigoni: a grounded theory approach*****,** is my own work. All sources that have been cited or quoted have been acknowledged throughout the study.

Steppies Richard Rikhotso

Student number: 28204141

ANNEXURE A

DECLARATION REGARDING PLAGIARISM

ANNEXURE B

Interview guide

A semi-structured, face-to-face individual interview will be conducted at co-researchers' homesteads with the language chosen by the participant (English, Tshivenda and Xitsonga). Nb! The researcher is fluent in all three languages.

SECTION A: BIOGRAPHIC DATA

1. Traditional health practitioner's code.(e.g. THP1_____
2. Gender: male / female
3. Type of traditional health practitioner: Diviner / Herbalist / Spiritual healer / Traditional surgeon / Traditional birth attendants / **other**_____
4. To which religion do you believe or belong: African religion, Christianity, Moslem, or **others**
5. Are you registered with the Council of THPs: **Yes / No**
6. Provide the registration number (**if yes**):----------
7. Experience in the management of *rigoni*: < 5yrs; 5 – 10yrs; more than 10 years
8. No. of mothers/infants managed for r*igoni* in a year: 0 – 5; 5 – 10; more than 10

SECTION B: MAIN QUESTIONS

1. Kindly explain, what is your understanding of the meaning of *rigoni*?

2. Explain the contributory factors that are related to *rigoni.*

3. May you please explain how *rigoni is managed*?
4. Explain how this *rigoni* can be prevented?

ANNEXURE B

INTERVIEW GUIDE

ANNEXURE C

Information leaflet and informed consent

Indigenous knowledge of traditional health practitioners in the management of rigoni: a grounded theory approach

Dear Participant

I am a PhD student in the department of nursing science, University of Pretoria. You are hereby invited to voluntarily participate in this study aimed at co-creation of a substantial theory that explains the indigenous knowledge of traditional health practitioners in the management of *rigoni*.

This study involves answering some questions about you as the traditional health practitioners who manages *rigoni* for both mother and infant, the average number of clients you manage in a year, your experience in this practice, your religious belief, your gender (male or female), and type of traditional healing. The main question will be how you manage *rigoni* within this context, Vhembe district. The interview will take place in an area chosen by you within your homestead for your comfort and to avoid interfering with cultural practices. There may be an assistant who will be helping the researcher with the logistics and language interpretation where necessary.

Confidentiality and anonymity will be maintained; the report of this study will be published or presented in such a fashion that you remain unidentifiable. The duration of the interview will be approximately 60 to 120 minutes. I will be taking notes during the discussion and a digital recorder will be used to record some data which the research may miss during the session.

Your participation in this study is completely voluntary, and you may refuse or terminate your participation at any time without stating your reasons. You will not incur any penalty or loss of benefits should you decide to withdraw from the study. **Nb! There will be no compensation or payment of any sort for participating in this study.**

The Research Ethics Committee of the University of Pretoria, Faculty of Health Science has granted written approval for this study.

If you have any questions concerning this study, you are at liberty to contact:

Mr Richard Rikhotso at 012 354 2128 / 012 354 2125 (office hours) or 0786445400 (cell number) at any time.

My supervisors, professor FM Mulaudzi at 0123542125 or doctor RS Mogale at 012 354 1445 / 012 354 2125 during office hours.

Yours truly

Richard Rikhotso

CONSENT TO PARTICIPATE IN THE STUDY

I have read or had read to me in a language that I understand the above information before signing this consent form. The content and meaning of this information have been explained to me. I have been given opportunity to ask questions and am satisfied that they have been answered my satisfaction. I understand that if I choose not to participate it will not alter my relationship with the researcher in any way. I hereby volunteer to take part in this study without coercion.

I have received a signed copy of this informed consent agreement.

…….. ……..

Participant signature Date

…… ……

Person obtaining consent Date

…… ……

Witness Date

VERBAL INFORMED CONSENT(*if participant cannot read or write*)

I, the undersigned, Mr / Ms/ Dr……., have read and explained fully to the participant, named……and / or his / her relative, the participant information leaflet, which has indicated the nature and purpose of the study in which I have asked the participant to participate. The explanation I have given has mentioned the possible benefits and that no monetary compensation will be obtained for participating in this study. The participant has indicated that he / she understands that he / she will be free to withdraw from the study at any time for any reason and without coercion or penalty imposed on him /her to which he /she agrees.

I hereby certify that the participant has agreed to participate in this study.

Participant's preferred name:……

Researcher's name: …….. Signature:……..

Witness name: …… Signature: ……Date: ……..

ANNEXURE C

INFORMATION LEAFLET AND INFORMED CONSENT

ANNEXURE D

PERMISSION LETTER TO MAKHADO TRADITIONAL HEALTH PRACTITIONERS' ASSOCIATION IN VHEMBE DISTRICT

164 Zambezi Estate

Montana

PRETORIA

0182

31 August 2014

Makhado Traditional Health Practitioners Association

P.O Box 2046

Elim Hospital 0960

Vhembe district

South Africa

Dear Sir / Madam

PERMISSION TO CONDUCT A STUDY AMONGST TRADITIONAL HEALTH PRACTITIONERS IN VHEMBE DISTRICT

I hereby request permission to conduct a study amongst traditional health practitioners within Vhembe district, Limpopo Province. The study is for the purpose of fulfilling the requirements of the PhD degree in Nursing Science through the University of Pretoria.

I am a nurse lecturer at the University of Pretoria with a Master's Degree in Nursing Science. The Ethics Committee of the University of Pretoria has already approved the proposal (**Annexure F**).

The title of my study is: *Indigenous knowledge of traditional health practitioners in the management of rigoni: a grounded theory approach.* The aim of the study is to generate a substantive theory that will guide and explains the indigenous knowledge of traditional health practitioners in the management of *rigoni*. The study will take place between December 2014 and June 2015. A qualitative study design using a grounded theory approach underpinned in indigeneity lens, under the indigenous knowledge system perspective, will be used to collect data. Interviews will be held with individual THPs at their homes at the time and venue chosen by them (THPs), to avoid interfering with their normal routine and to honour their cultural and traditional practices.

The participants / co-researchers will be provided with information leaflet that will be explained thoroughly prior to commencement of the study, followed by voluntary signing of informed consent form, without any coercion. All ethical principles related to human participants will be adhered to. The results will be shared with the Council of Traditional Health Practitioners and the practitioners themselves.

Your consideration in this matter will be highly appreciated.

Yours faithfully

Mr Richard Rikhotso

E-Mail: richard.rikhotso@up.ac.za

Tel: (012) 354 2128

Mobile No. 0786445400

ANNEXURE D

PERMISSION LETTER TO MAKHADO TRADITIONAL HEALTH PRACTITIONERS' ASSOCIATION IN VHEMBE DISTRICT

ANNEXURE E

PERMISSION LETTER FROM MAKHADO TRADITIONAL HEALTH PRACTITIONERS ASSOCIATION

MAKHADO TRADITIONAL HEALTH PRACTITIONERS ASSOCIATION
MATHPA

Enq: Ramabulana / Nesengani N.C Chairperson
Cell: 073 278 3053 / 082 405 5899
Enq: Mufamandi R. Secretary
Cell: 073 458 0554
Email: chissie.rams@gmail.com

P.o. Box 2046
Elim Hospital
0960
Reg: 122-741 NPO

Dear Sir/Madam

MAKHADO TRANTIONAL HEALTH PRACTITIONERS ASSOCIATION IS GIVES M.AUTHORITY TO MR RICHARD RIKHOTSO(RESEARCHER, UNIVERSITY OF PRETORIA) TO COME AND DO RESEARCH ABOUT CHILDREN'S SICKNESS CALLED "RIGONI, GOKHONYA" THE ORGANISATION IS FOUND AT MAKHADO MUNISPAL IN VHEMBE DISTRICT

YOURS FAITHFULLY

Signature..... Date 03-11-2014

Forward with healing the nation

AIDS Awareness

ANNEXURE E

PERMISSION LETTER FROM MAKHADO TRADITIONAL HEALTH PRACTITIONERS ASSOCIATION

ANNEXURE F

UNIVERSITY OF PRETORIA ETHICS COMMITTEE

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

Approval Certificate New Application

27/11/2014

Ethics Reference No.: 477/2014

Title: Indigenous knowledge of traditional health practitioners in the management of rigoni: a grounded theory approach Dear Mr Steppies Rikhotso

The **New Application** as supported by documents specified in your cover letter for your research received on the

24/10/2014, was approved by the Faculty of Health Sciences Research Ethics Committee on the 26/11/2014.

Please note the following about your ethics approval:

- Ethics Approval is valid for 3 years.
- Please remember to use your protocol number (**477/2014**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:

- The ethics approval is conditional on the receipt of 6 monthly written Progress Reports, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

*** Kindly collect your original signed approval certificate from our offices, Faculty of Health Sciences, Research Ethics Committee, H W Snyman South Building, Room 2.33 / 2.34.*

Professor Werdie (CW) Van Staden
MBChB MMed(Psych) MD FCPsych FTCL UPLM
Chairperson: Faculty of Health Sciences Research Ethics Committee

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The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

---

012 354 1677 0866516047 deepeka.behari@up.ac.za
http://www.up.ac.za/healthethics
Private Bag X323, Arcadia, 0007 - 31 Bophelo Road, HW Snyman South Building, Level 2, Room 2.33, Gezina, Pretoria

ANNEXURE F

LETTER FROM THE UNIVERSITY OF PRETORIA ETHICS COMMITTEE

ANNEXURE G

Additional interview transcripts

13 May 2016

THP2s (Kutama - Tshikwarani)

RES: Researcher

THP: Traditional Health Practitioner

Transcripts

RES: Good after Vhomaine. As I discussed with your earlier, I am Richard Rikhotso, researcher from the University of Pretoria. I am conducting a study regarding infant illness, but I focus on *rigoni.* I would like to ask you questions regarding infant illness *rigoni.* …do you allow me to continue?

THP2s: You may ask me!

RES: *Goni kana rigoni nndi mini* (what is rigoni)?

THP2s: Some say it is gokhonya, some say it is *rigoni.* It is more related, but people explain it differently. When we come to *gokhonya*, the name *gokhonya, gokhonya* means that during the birth of the infant, *gokhonya,* the illness, *khokhonya n'wana* (knocks the infant).

RES: Is't like knocking on the door?

THP2s: Yes, but this **illness knocks the infant when he / she passes through the birth canal**, and the **infant passes with the illness**. That is why it is called ***gokhonya* i**n Tshivenda. Our Venda is not the same. But us this **illness of gokhonya, we call it *goni*.** This *goni,* the name *goni*, if you look carefully it is *goni*. This *goni*, if it **passes where there are chickens** it will **pick the chicken**. So it is this illness.

RES: If you compare the goni bird, the chickens and the hen, how does it relates to the illness?

THP2s: The hen is the mother, **the chicken is child**. *Goni* is there! It will pass and ***doba n'wananga*. *Nndi goni***. Those who **call it gokhonya** is another way of calling it because **it completes the meaning, it knocks the infant**, because it does not hit everywhere, but **on (*kha chitiko*) the occiput.**

RES: So it knocks on the occiput of infant?

THP2s: Yes it hits on the occiput of the infant.

RES: So, tell me how do you see that the infant has goni?

THP2s: Ok! This *goni* does two things on infants. To some **it knocks on the occiput**. There will **be reddish marks all over the occiput**. ***O tsukuluwa-tsukuluwa***. To some infant it is not on the occiput. When you carry the infant on your arms, the infant changes, ***a tsukuluwa* on areas you touched, showing redness**. This means that **the illness is hidden**.

RES: So when it is hidden…..

THP2s: that means it is the one which kills infants because **it is invisible (*a li vhonali***), but it is still that *goni.*

RES: so if I bring the infant and after examination you **do not detect *goni***, what do you do?

THP2s: Ok. What I do I will say, but this infant's *goni* is not clear. So I **cannot leave the infant alone, *nndi ya n'wi elela*,** because it might have knock the infant internally because it is **not visible outside.**

RES: What is *u lelela*?

THP2s*:* ***U elelela*** is to take the infant and ***aravhedza nga mishonga***, and incision made to **apply *mishonga*.**

RES: When you *aravhedza*, what does the infant *arhavela*?

THP2s: Oh right! That is very good. Long time ago when we treat goni on people like myself, I use ***mishonga*** dug from the bush. That is herbs from the bush. I incise the infant and apply **the herbs, smoke inhalation, grind the herbs and incise for application of the herbs**. I take some traditional herbs to give to the mother of the infant. This **traditional herbs** should be **placed on the infant vest,** the **clothes of an infant**, fold the vest and the mother instructed **to *ambarela* when she sleeps**. *U ambarela* is to insert the folded herbs in the vest into the mother (maternal vagina introitus).

Currently, because of the other illnesses mothers suffer from, I do **not give herbs for u *ambarela,*** because I will be taking **mother's illness and feed the infant**. Do you clear understand? Nowadays we prepare the herbs to be added **into soft porridge**. If the infant is not yet **ready to eat soft porridge**, I advise the mother to add **into water for drinking**. The infant is fed the water with a teaspoon.

The **drinking of the herbal water** is to ensure that **the herbs moves** with the infant's blood.

RES: When the ***goni* bird passes** and people shout, the hen calls **the chicken and opens her wings to protect them**. So as mothers, what do you do to protect the infant from the illness?

THP2s: Yes there is something that we do to protect the infant. It is done but not by all the people. Me personally, I am talking about me. I do not remove *goni* from the mother. I treat the infant. There

are those who remove goni from the infant. Those who remove it from the mother, is it that women of **yesteryears and of today** are not the same, because these young girls can for example be in love with you and fall pregnant. She is a muselwa she is taken to the elders for inspection of the illnesses. She will be **inspected and illnesses be removed** / treated before she knows what to give birth means. Because those illnesses, many of them blocks her to fall pregnant. It prevents falling pregnant. ***Muselwa*** is a woman who is married, but before she is sent to her husband she undergoes vaginal examination to detect illnesses earlier. It differs from family to family, **some take the woman for *muselo*** when she is after delivery of the infant. They will inspect for the illness from the mother, if they identify illnesses, they remove the illnesses and treat. Do you see that there is a difference on this matter? The removed illness are taken by the THP, placed on the *tshidongo*, and burn. Add herbs and mix, **then *va thavhela n'wana*.** It is when there was no this **malwadze a *mukhuxwane*** (literally illnesses of coughing) which kills people. Now the infant comes, I *arhavedza, arhavhedza*, I take my traditional herbs and grind. I ensure that the infant bleeds on the affected area before applying the traditional medicine. I incise such that the parents have pity for the infant, but I am not killing him / her. I am trying **to *lalamisa* the infant**. Do you see? You will see the infant yourself.

RES: I spoke to some THPS who say *goni or gokhonya* comes with males who infect females. Females infect the infant during birth.

THP2s: That is not *goni.* It is not related to goni. There are many illness, there is lukuse, this is what men have, not goni. Lukuse is not treated by many THPs, no. this *lukuse* when I grew up, I heard it was treated by other people around here and at Manamela village, I just heard. I do not know what it is. ***Lukuse* causes many problems in men**. A man may marry many wives, but they are knocked by the illness and die. That is lukuse. If a woman is found not to have goni, is taken to ***ndiloni* because her infant dies** everytime after delivery. Even men are taken to *ndiloni*.

RES: It means *goni,* if the mother is not treated *goni,* what will happen to her?

THP2s: If the mother is not treated *goni,* and deliver the baby. If not she will deliver and check the infant, **the infant will undergo all traditional rituals**. There are three rituals performed for the neonate. Before the infant leaves the **house *tshipande*** is incised, then ***a sedziwa for goni,* it is 'stealing' for *goni*** as it is not confirmed. **Minor incisions** to reduce the loss of blood because the infant is still too young to loose blood. I calculate days to a month for the return of the infant. Then that is where I will treat goni using mishonga mentioned above. The infant will be happy.

RES: This traditional herbs for u thusa n'wana, does it differ from the one for *goni?*

THP2s: They are not the same. It is not one herb, all three herbs are not the same. The infant who received ***tshipande*** is protected from evil acts. The infant will not experience some twitchiness and not weak. The infant not given *tshipande* is always disorganised and uncontrolled limbs and head.

Does not sleep well, but not sick. This means the infant did not receive all the elderly women rituals. It is called the infant did not receive all *mixo ya vakegulu*. When we come to *muthuso,* when the infa t is thusa the infa t receive traditional herbs for **protections against fits *(zwifakole) and bakavanna***. Have you heard of *bakavanna*? It hits the infant and when the mother does not know, she will cry and the disability becomes permanent. Because of lack of knowledge. This ***muthuso* protects** the infant from different illnesses, especially infant born within families which follow the practices of indigenous elderly women. Do you understand?

RES: how do the colours where goni has knocked look like?

THP2s: There are colours. **Red colours as if the infant** has been stung by something. The infant does not sleep and cries the whole night. The body becomes hot, the infant bends the neck forward, indicating that at the back has been heavily knock. It is very very dangerous. It is busy knocking the infant, it is doing its job. The mother must quickly note why the infant suddenly after hotness of the body, and then sleeping, there is a problem. The infant is in severe pain. Knowledgeable elders will ask if the infant received *mixo*, and explain to the mother. When they bring the infant because of sleepiness and hot body, I ask if the infant **received *mixo,* if** not then I immediately incise and apply the traditional herbs to treat the infant. I do not take money before the infant is healed. There will be a follow up, then I will charge.

RES: Earlier you said that the infant undergoes three rituals. What are they?

THP2s: It *tshipande*, partial goni treatment and *u thusa*. These are the three ritual which all our traditional infants must receive.

RES: Except physical examination and observation of the infant for diagnosis of *rigoni*, what other thing do you do to assist in the diagnosis?

THP2s: I ***elela* the infant**. It is to incise the infant. We incise because we do not know where *goni* has knock for this infant. We incise as it may be hiding. If we do not incise it may be problematic and disguise the danger. If you miss this the infant dies. Some Vhomaine also miss to perform the rituals when goni is invisible. ***Tshipande* is done by all elders**, irrespective of being a THP or not. It is a traditional and cultural practices in all communities. Some parents, even if there is no elderly woman in the family, they contact other neighbours to assist with *tshipande. Tshipande* is the first ritual to be performed, though it does not kill, but the infant does not sleep comfortable

RES: What do you give the mother to treat *rigoni*?

THP2s: There are those women who consult because they experience difficulty in delivering the baby. I have one herb which I give to the women, is like ***muroho wa mukusule* (dried vegetable leaves). I** give her seven rolled herbal leaves. The mother must dissolve and insert vaginally when

she goes to sleep, one by one for seven days. During this period she must not have sexual intimacy with the husband. She insert this herbs every night and remove it at about 22h00. This herbal medicines assist the infant to come done slowly. I do not incise goni. Even the elderly women sitting outside there can attest to it. As long as I have given this herbs, the women will deliver, no matter what. Usually this difficult deliveries are male infants, that is, my experience so far with these mother who experience difficulties during delivery. … Laughing…..

RES: Thanks very much. So, is there anything that you want to add from the discussion which we had today?

THP2s: Any other thing? If I had to explain, it depends on how we work. There is something that I was taught that some of the young girls are not to get injections. There is that tendency of missing her periods meanwhile the infant is still too young. If she comes to me and explain that she missed her periods, but still breastfeeding, I request her not to stop breastfeeding. I prepare herbal medicines. The medicines will be soaked into water for the preparation of soft porridge. The day the infant reject the breast, the mother will deliver the newborn. The following day the elder infant completely reject the breast, without using hot chillies. That goni is excised from the mother I do not know, and I cannot do that. That is how I treat goni.

RES: By the way you said men does not have *goni?*

THP2s: Men does not have *goni.* They suffer from lukuse. Most men when they have women, after sexual intimacy with this woman, she dies because **of *lukuse***. He may marry many wives and they all die, without being noticed by people that this man is sick. But if this man can be **sent to *ndiloni* for treatment by THPs who knows**, he can be healed. It is only that people nowadays work for hunger, without knowledge of the illnesses. Some work for money even if they do not know the treatment of the illness, they claim to be capable of managing it, eg. R500. But if you want to assist people honesty, you tell the client that I cannot assist you in this, then refer to someone who is able to treat the illness. Most illness cannot be diagnosed by the use of traditional bones. Gather data from the client to identify if the client was treated for ndiloni. I have not treated *lukuse,* I just heard how they treat it. They say after using the herbs for lukuse on males, there will be a worm which came out of the area. I do not know, that what I heard. Men does not have *goni* to infect the infant. Men suffer from lukuse, *diropo* and these new illness, not *rigoni.*

RES: Vhomaine, is there a time where you use thangu to diagnose *rigoni?*

THP2s: ***Thangu* do talk to me**. But *goni* cannot be diagnosed with thangu. You only catch goni through cleverness, otherwise, you will not. It is like this huge illness (HIV/AIDS), if you consult me, I will immediately tell you to contact the clinic and use the pills for the sickness. Even if the client denies that she is sick, some refuse to disclose the sickness, but I pick it up during the discussion. I

advise the client not to discard the pills. She must continue taking them as explained by doctors. Mr XXXXXXXXX helped us to understand patients with HIV/AIDS…

RES: Thanks very much.

ANNEXURE G

EXAMPLE OF LINE-BY-LINE CODING