THE USE OF TRADITIONAL FOLK MEDIA TO CONVEY DIABETES MESSAGES AT PUBLIC HEALTH CARE SERVICES

by

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Dissertation submitted in fulfilment of the requirements in respect of the Master's Degree in the Department of Communication Science in the Faculty of Humanities at the University of the Free State.

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DECLARATION

I, Daluvuyo Lesego Treasure Radebe, declare that the Master's Degree research dissertation or interrelated, publishable manuscripts/published articles, or coursework Master's Degree mini-dissertation that I herewith submit for the Master's Degree qualification in Communication Science at the University of the Free State is my independent work, and that I have not previously submitted it for a qualification at another institution of higher education.

June 2019

Daluvuyo Lesego Treasure Radebe Date

DEDICATION

In loving memory of my grandmother, Emily Nondlela Radebe, whose soul rests after having battled diabetes for over 25 years.

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I would like to express my deepest and most sincere appreciation to the following people and organisations for making this work possible:

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CONCEPTUAL AND OPERATIONAL DEFINITIONS

The following concepts will be used frequently throughout the study. To ensure a clear understanding, the concepts will be clarified according to conceptual and operational definitions.

Awareness: Awareness may be defined as a state of being knowledgeable or the ability to be conscious of events, objects and various other sensory stimuli. Awareness in its simplest form refers to the notion that although observers may be conscious of certain stimuli, it does not necessarily imply understanding (Gafoor 2012: 2).

In this study. *Awareness levels* refer to measuring diabetes related awareness amongst patients attending public health care services. Levels were measured thruogh pre and post- tests. *Long-term awareness* refers to respondents' ability to provide correct answers on diabetes messages presented to them after 4 weeks of receiving the messages.

Diabetes messages:

Diabetes also referred to as diabetes mellitus and includes the most common occurring diabetes mellitus type 2. The disease is characterised by high blood glucose levels. The main reason for the high blood glucose levels being the inability to regulate insulin levels (Walker, Colledge, Ralstron & Penman 2014: 800).

Messages can be defined as the vehicle used by a sender to convey information, nonverbal or written and are intended to be retrieved by the receiver in the same mental perspective as the sender (Karmin 2017: 1).

In this study, the term diabetes messages will be used to refer to the six key messages that were previously identified in cycle 1 of the research project. These messages emerged from key ideas that were identified as important information to be conveyed

during cycle 1 of the research project. The operationalising of the message itself is also included in brackets, which specifies how each of these messages will be presented to respondents in the research instrument. The categorisation of intervention techniques, which will be used to convey messages, is also included below:

Messages one and two will be conveyed through storytelling:

1. Diabetics can enjoy a normal life

(Diabetic people should avoid social gatherings)

2. Diabetes can be controlled and complications prevented

(Not all diabetic people go blind or lose an arm or leg)

Messages three and four will be conveyed through poetry:

3. Walk fast for at least 30 minutes on most days

(Diabetic people do not have to exercise)

4. Lose weight as prescribed

(Diabetic people do not have to worry about losing weight)

Messages five and six will be conveyed through song/dance

5. Medication must be taken as prescribed

(Diabetic people should take diabetes medication even when they do not feel sick)

6. Eat small regular meals

(Diabetic people should not eat one big meal a day)

- **Public health care service**: The center for Disease Control and Prevention (2017: online) defines public health care services as:

“All public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction. This concept ensures that all entities contributes to the health and well-being of the community or state are recognized in assessing the provision of public health services”

In this study, the term public health care services will be used to refer to the sampled clinics where the data collection for the research will take place.

Traditional folk media: Traditional folk media as a concept can be defined as indigenous equivalents of mass media that use performance arts to entertain, promote education, values and cultural continuity in communities (Clift 1990:172).

In this study, the term traditional folk media refers to the specific performance arts that will be used namely: storytelling, poetry and song and dance.

ABSTRACT

This study forms part of a multi-phase research project in South Africa (SA) that intends on developing, testing, implementing and evaluating a health dialogue model for patients living with type 2 diabetes in the Free State province of SA.

Traditional folk media can be successfully used to convey health information to patients in low and middle-income countries. This communication medium holds potential for breaking through communication barriers and since it carries cultural significance; it is trusted and influential amongst indigenous groups. The number of people living with diabetes has increased drastically in the last decade, seemingly more so in low and middle-income countries. In 2016, approximately 1.6 million lives were lost to diabetes worldwide and statistical reports suggest that this global phenomenon will be the leading cause of death in SA by the year 2040. This necessitated the use of innovate and culturally centred methods for conveying diabetes information and raising awareness of this illness in SA. A previous study conducted in the Free State identified six key messages to raise community awareness of diabetes. This study presents the use of traditional folk media to convey these identified diabetes messages to patients attending public health care services in the Free State province.

The study used a quantitative quasi-experimental pre-test post-test design. Random sampling of public health care services (N=26) was done in order to sample three services from Thaba ‘Nchu and three services from Botshabelo. Respondents (n=183) from the sampled services where conveniently selected, with the control group (n=63) and experimental group (n=120) undergoing a pre-test and 4-week post-test using structured questionnaires. Respondents from the experimental group received key

diabetes messages conveyed via storytelling, poetry and song/dance. Frequencies and percentages for categorical data and medians and percentiles for continuous data were calculated per group.The groups were compared by means of the Chi Square test, Fisher's exact test and the change within a group was compared by means of the McNemar's test.

In spite of an even gender distribution amongst the Sesotho speaking population in both control and experimental groups, more female respondents took part in the study in both the control group (63.5%) and experimental group (69.2%) than men (36.5%; 30.8%). Non-homogenous pre-test results occurred in the control and experimental groups. According to the P-values calculated between the control and experimental groups' pre and post-test phases, only message one presented using storytelling and message four presented via poetry, presented statistically significant changes from the pre-test to 4-week post-test phases of this study.

Traditional folk media can be used to raise diabetes awareness to patients from an indigenous language group, such as the Sesotho speaking population from the Free State province. Communication and healthcare practitioners should therefore not underestimate the value of traditional folk media when promoting health messages.

Keywords:

Diabetes messages, health communication and traditional folk media

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CHAPTER 1

INTRODUCTION

1.1 Background

This study forms part of a multi-phase research project in South Africa, which was guided by the Development and Evaluation of Complex Interventions framework as presented by the Medical Research Council of the United Kingdom (2008). This multi -phase research project intends to develop, test, implement and evaluate a health dialogue model for patients living with type 2 diabetes in the Free State (Reid, Walsh, Raubenheimer, Bradshaw, Pienaar, Hassan, Nyoni & Le Roux 2018:125).

The developmental phase (see figure 1.1), the first phase of the research project (cycle 1), created opportunities to develop a health dialogue model for patients diagnosed with type 2 diabetes. This phase consisted of three projects, namely:

- developing a concept analysis for a health dialogue;
- conducting a systematic review on the communication strategies used in adults with chronic disease in low and middle income countries; and
- conducting a knowledge, attitude and practice survey amongst health care workers caring for patients diagnosed with type 2 diabetes as well as these patients themselves.

Each project theme noted above was carried out as individual studies and the data obtained from these studies indicated the community, the patient and the health care worker as important focus areas in diabetes management. Currently, the multi-phased research project is in the second phase –the feasibility phase (cycle 2), which incorporates the three focus areas noted above. The feasibility phase aims at testing

the practicality of the health dialogue model through a phased approach with various projects in each phase.

The first phase, in cycle 2 addresses the community's awareness and the focus here is on establishing the community's awareness of diabetes. This will be investigated through two projects namely: profiling the patients attending public health care services and using traditional folk media to stimulate the community's' awareness of diabetes. The current study resides within the first phase of cycle 2 (see figure 1.1) and will only report on this section of phase 1 (see highlighted section in figure 1.1).

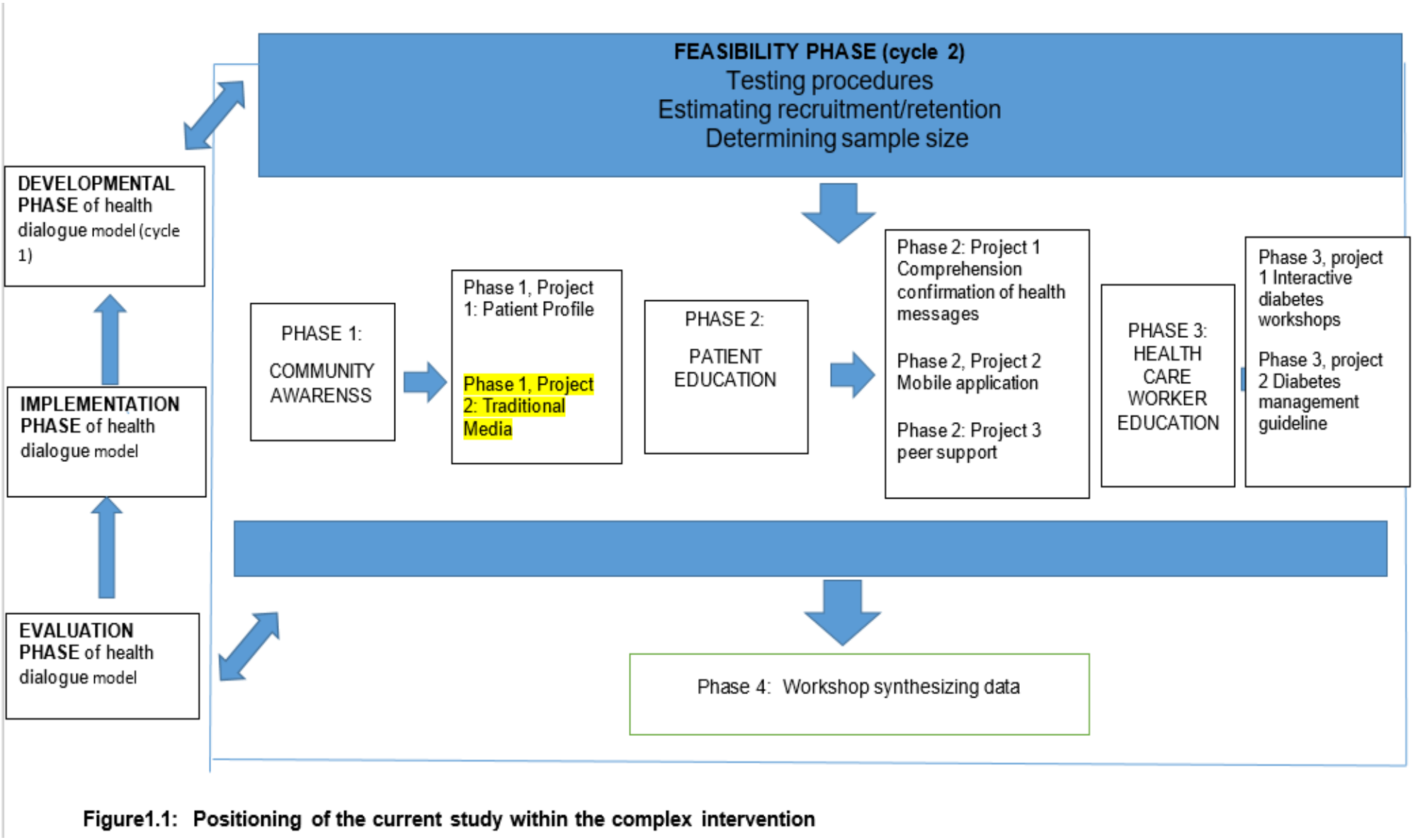

Figure1.1: Positioning of the current study within the complex intervention

2 Introduction

World-wide the number of people being diagnosed with diabetes is increasing with specific reference to low-middle income countries (Whiting, Hayes & Unwin 2003:103). According to the World Health Organisation (2010: online) almost 80% of diabetes deaths occur in low-middle income countries and half of the deaths caused by diabetes occur in people under the age of 70 years. Diabetes is a complex disease that results from a number of factors that can be genetic or environmental but studies have found that cultural, dietary, behavioural and lifestyle factors are primary variables that contribute to the diagnosis of diabetes (Platt, Hariri, Salameh, Merhi, Sabbah, Helou, Mouzaya, Nemer, Al Sarraj, Shanti, Abchee & Zalloua 2017: 1). Diabetes is a chronic disease that occurs when the body cannot effectively use the insulin that it produces (WHO 2010: online).

This pandemic is the leading cause for kidney failure, heart disease, strokes, blindness and lower limb amputation, it is also predicted that the life expectancy of people living with diabetes is four to eight years lower than those living without this disease (WHO: 2010; Betoluci & Rocha 2017: 2-3). It is estimated that by 2025 every three in four people residing in low-middle income countries will be living with diabetes (Giannella-Neto & Gomes 2009: 1). The dramatic increase in the prevalence of diabetes does not only affect the individuals diagnosed with it, families and economic and public health structures are also burdened as a result of the pandemic (Whiting, et al 2003: 103; Platt, et al 2017: 2; Holt, Groot & Golden 2014:490). However, Ginnella-Neto and Gomes (2009: 2) sheds light on the fact that the unhealthy lifestyle decisions people make, should not be the only area of concern with regard to the issue of diabetes. In fact, the lack of sufficient professional and material resources in public health care

systems should also be given a considerable amount of attention. These factors, among others, contribute to the increasing number of people with poorly managed diabetes, which exposes diabetics to higher risks of experiencing diabetes related complications (Ginnella-Neto & Gomes 2009: 2).

Moreover, diabetes management in low-middle income countries relies heavily on public health care services. In the case of South Africa and other low-middle income countries, assessments of health care for diabetes were conducted over a period of 10 years. The findings revealed key themes such as: low patient attendance at health care services, poor organisation of service, poor management of complications, inadequate staffing levels and limited consultation periods which leave little or no time for patient education (Whiting, et al 2003: 103).

Although the South African public health care system has shown some improvement over the last five years (Visagie & Schneider 2014: 3) inadequate resources, insufficient staffing and little to non-existent patient education are still some the factors that challenge public health care systems to date. Abdoli, Maradanian and Mirzaei (2012: online) argue that health care practitioners are responsible for how individuals in society interpret diabetes and that health care practitioners through communication can empower, educate, support and attempt to change the perceptions of communities. Although Rimal and Lapinski (2009:247) agree that health care practitioners, through communication can educate and empower patients to make better health choices, they also mention that it would be difficult for health care practitioners to carry out this responsibility alone, considering their strained working conditions. A number of authors (Ng, Chan, Lian, Chuah, Waseen & Kadirvelu 2012: 710) mention that a lack of knowledge is one of the leading reasons for the sturdy increase in the prevalence of diabetes. However, through the implementation of

intensive diabetes awareness and education initiatives, the quality of health and life in diabetic patients, larger communities and populations in general can be improved. This has led to a prominent growth in the field of health communication which is characterised by interactive collaborative relationships between patients, health care workers, communication practitioners, communities, government sectors and other institutions in an effort to engage, inform, persuade and motivate audiences about important health issues (Feeley & Chen 2014: 843). Included in the field of health communication are disease prevention communication, health promotion, and health care policies among others (ibid). Therefore, health communication is being used worldwide to convey health information to relevant audiences using various health communication channels and strategies like mass media campaigns with embedded health messages. Examples of the latter include, among others, family planning initiatives, HIV/AIDS prevention, obesity and tuberculosis awareness which have been well documented (Gupta, Katende, Bessinger 2003: online; Wakefield, Loken, Hornik 2010: 191).

In South Africa, mass media has been used to convey health communication campaigns with the aim of educating people about HIV\AIDS as well as tuberculosis. In 2009 the Soul City Institute for Health and Development Communication launched the mass media campaign OneLove, in an effort to educate people about HIV\AIDS and contribute to the reduction in new HIV\AIDS infections (Jana, Letsela, Scheepers & Weiner 2009: 253). However, mass media campaigns have not proven to achieve long-term success. Rimal and Lapinski (2009: 247) suggest that health communication practitioners need to use communication strategies that will be culturally appealing to audiences in order to encourage audiences to accept and internalise the essence of the messages, thus changing attitudes and practices.

According to several authors (Clift 1990:172; Panford, Nyaney, Amoah & Aidoo 2001: online; Kumar 2006: 93; Nag 2013: 13 & Prilutski 2014: 22), this could possibly be achieved through using traditional folk media in health communication initiatives. Traditional folk media can be described as indigenous channels of communication that have been used for decades to convey messages of traditional value, customs, experiences and beliefs from one generation to the next (Mishra & Newme 2015: 1-5). Traditional folk media exists in various forms and has the potential to command a strong position in one's mind because messages conveyed through this medium are culturally rooted thus coming across as personalised to audiences (Kumar 2006: 95; Mishra & Newme 2015: 1-5). In recent years, it has been documented that scholars have been successful in using traditional folk media in low-middle income countries as a tool for promoting health awareness and education regarding a range of health issues (Mohanty & Parhi 2011: online; Yoshida, Kobayashi, Sapkota & Akkhavang 2012: 52; Rimal & Lapinski 2009: 247).

Since South Africa is a low-middle income country, and the prevalence of diabetes is especially higher in these regions (WHO 2015: online), it is clear that health communication strategies that will appeal to people's cultures and their way of life are necessary. Moreover, these strategies should educate people about diabetes in order to promote attitude and practice change and ultimately, reduce the number of diabetes related fatalities (Ng, Chan, Lian, Chuah, Waseem & Kadirvelu 2012: 710; Maina, Ndegwa, Njenga & Muchemi 2010: online). In South Africa, there is poor documentation of health communication programs that integrate indigenous forms of communication to promote health information (ibid). In light of this, the following research problem stated below was identified.

1.3 Problem Statement

Literature on traditional folk media and its application in health communication suggests that it is a powerful tool, which can be used to promote health messages in low-middle income countries and communities. Furthermore, this medium is particularly effective in low-middle income countries because it accommodates low literacy levels and can break through cultural barriers (Kumar 2006: 95).

Although literature points this out, health practitioners have not fully explored this field and therefore may be unenlightened about the advantages it holds. This then means much research is needed to describe the use of traditional folk media when conveying key diabetes messages at public health care services in the Free State to raise awareness on the seriousness of a chronic disease, which leads to the research question stated below.

1.4 Research Question

Would the use of traditional folk media raise diabetes awareness amongst patients attending public health care services in a sub district in the Free State?

The research objectives ahead will be realised in order to answer the research question stated above.

1.5 Research Aim and Objectives

The aim of this study is to describe the use of traditional folk media when conveying diabetes messages at public health care services in the Free State. A phased approach will be followed to achieve this, with each phase linked to its respective objective (please see table 1.1).

Table 1.1: Research objectives linked to respective phase of study

Phase	Objective
Pre-test and Post-test phases[1*]	To measure diabetes related awareness amongst patients attending public health care services using pre-tests and post-tests.
Traditional Folk Media Intervention Phase	To present an intervention using traditional folk media (song\dance, poetry and storytelling) to convey identified key diabetes messages.

1.6 Research Paradigm

The concept of a paradigm originates from the word paradeigma, which means pattern in Greek. This term was first applied to research by Kuhn (1962) who described a research paradigm as “the set of common beliefs and agreements shared between scientists about how problems should be understood and solved”.

Several research paradigms exist and the positivist, post-positivist, interpretative/constructivism and critical realism paradigms among others are well known and widely used across various disciplines (Du Plooy-Cilliers, et al. 2014: 19-31). In accord, Chilisa and Kawulich (2012: online) describe research paradigms as a world view that informs and guides researchers with regard to the questions to be asked and the relevant systematic approaches that need to be followed during the process of enquiry. A research paradigm gives light to the nature and background of a study based on its epistemological, ontological, axiological and methodological,

[11*] A repeat measurement of the post -test will be conducted after a period of four weeks (4-week post-test-phase)

philosophical assumptions (Du Plooy-Cilliers, et al, 2014; Botma, Greeff, Mulaudzi; Wright 2010: 39 & Kivunja & Kuyini 2017: 26). For the purpose of this study, only the post- positivist paradigm will be discussed, since the study identifies with this paradigm.

1.6.1 Post-Positivist Paradigm

Ontology speaks to how the nature of reality is perceived, epistemology to how knowledge comes about, while axiology is concerned with values and ethics pertaining to research studies (Patton 2002: 263; Littlejohn & Foss 2011:23).

The post-positivist paradigm is adapted from the positivist paradigm and attempts to discover general laws in order to make generalisations (Chilisa & Kawulich 2012: online). The ontological assumptions of this paradigm state that reality is based on observations and experiments, is quantifiable and can be categorised into variables for objective measurements in order to produce statistical predictions about phenomena (ibid). However, unlike the positivist paradigm that states that only one tangible reality exists, the post-positivist paradigm acknowledges that the human element and variations in context, pose limitations and therefore, reality cannot be perceived with total accuracy but can be discovered within a certain realm of probability (Littlejohn & Foss 2011:30; Chilisa & Kawulich, 2012: online).

The nature of knowledge in this paradigm is believed to exist autonomously from the personal quirks of researchers, its concerned with phenomena that can be tested empirically, can be validated or disconfirmed and verified for replication and generalisation purposes (Chilisa & Kawulich 2012: online). Knowledge is believed to be learnt outside of researcher's biases, making it imperative for researchers to provide precise measurements and controlled methods for observing events

(Littlejohn & Foss 2011: 30). Further epistemological assumptions include that, knowledge is created through concrete, objective data and can be attained through employing appropriate data collection tools.

The axiological stance of the post-positivist paradigm recognises that the theories, hypothesis and background knowledge held by researchers can influence the processes and outcomes of observations but, still advocates for value-free research as an ideal stance (Chilisa & Kawulich 2012: online).

Research conducted in the post-positivist paradigm aims to explain and predict phenomena, test theories or describe the strengths of relationships between variables. These variables are described according to how researchers will quantify, use or observe the variables in their study thus assigning operational definitions (Chilisa & Kawulich 2012: online). Since the research problem, pertaining to this study involves investigating whether using traditional folk media to convey key diabetes messages at public health care services in the Free State will assist in increasing awareness, the post-positivist paradigm is suitable to inform methodological procedures because it employs quantitative research designs to solve research problems (Chilisa & Kawulich 2012: online). Furthermore, the nature of this paradigm will enable the researcher to take into account various realities that may be outside of the researcher's control, such as the unpredictable nature of the human element.

1.7 Research Design

The study will use a quantitative quasi-experimental pre-test post-test design. Labaree (2009: online) describes the research design as the chosen overarching strategy for integrating the various components of a study in a coherent and logical manner, with the purpose of effectively addressing the research problem**.** This design was chosen

because it will enable the researcher to observe the possible deviations between the pre-post and 4-week post- test scores of respondents, in order to describe the degree of success that conveying interventions using traditional folk media to raise awareness on diabetes in a community had. More details on the research design are provided in chapter three.

1.7.1 Quantitative Design

The study will use a quantitative design, which, Wimmer and Dominick (2011: 49) describe as a design that uses standardised methods and procedures to measure variables under consideration and then communicate the findings in the form of numerical data. More details are provided in chapter three.

1.7.2 Quasi-Experimental Research Design

A quasi-experimental design will be adopted, such designs are used when the researcher does not have option of randomly allocating respondents to groups, yet still allowing researchers to make a comparison between groups (Wimmer & Dominick 2011: 49; Du Plooy-Cilliers, Davis & Bezuidenhout 2014:163). This design was chosen because the respondents in the study will be conveniently selected. More details are provided in chapter three.

1.7.3 Pre-Test Post-Test Design

The study will use the Classical Quasi-Pre-Test Post-test research design because as noted by Moore (2008: online) studies that adopt this design are still able to compare the outcomes for groups of individuals receiving an intervention programme, with the outcomes of similar groups of individuals not receiving intervention programmes. This will enable the researcher to have both a control group and experimental group for the interventions, regardless of the absence of random assignment of respondents, under

the condition that respondents are akin. Furthermore, this research design will be adapted to include an additional post-test measure termed the 4-week post-test in order to fully satisfy the research objectives pertaining to the study. Details are provided in chapter three.

1.8 Interventions

Du Plooy (2009: 402) defines an intervention as “a treatment or manipulation of independent variables(s) to measure their effects on the dependent variable (s). In this study interventions in the form of traditional folk media performances namely: song and dance, storytelling and poetry will be administered as the independent variable, while the respondent’s awareness levels of diabetes will be the dependent variable in order to probe if using this medium would be effective in enhancing knowledge and awareness of diabetes in communities. More details are provided in chapter three.

1.9 Research Technique

Structured interviews by means of questionnaires will be used as a research technique for capturing the data during the pre, post and 4-week post-test assessments. More details are provided in chapter three.

1.10 Population and Sampling

The study will be based in two communities in Botshabelo and Thaba ‘Nchu amongst all patients attending public health care services in these communities in the Free State province in South Africa, irrespective if they are diagnosed with diabetes or not. A random sampling of the public health care services (n=26) will be done in order to sample (n=6) of the public health care services. All respondents (n=300) will be

conveniently selected in each of the sampled public health care services and should adhere to the inclusion\exclusion criteria. More details are provided in chapter three.

1.11 Pilot Study

A pilot study will be conducted at the Gabriel Ditchabe primary health care service in Bloemfontein. Respondents (n=25) will be conveniently selected. However, the results of the pilot study will be excluded during the analysis phase of this study. Details on the lessons learnt during the pilot study are discussed in chapter three.

1.12 Data Collection

Figure 1.2 below is a summary of the data collection process. Respondents will be requested to respond to six messages by means of touching one of two coloured balls, which will be placed in front of them. The researcher will record respondents' responses on questionnaire forms. The data collection period will take up to six weeks to complete.

Permission to collect data was obtained from Free State Department of Health and the District manager (please see addendum 3 and 4). Ethical clearance was granted for the overarching research project, by the Health Sciences Research Ethics Committee (please see addendum 2) and ethical clearance (UFS-HSD2017/1395) for this study was granted by the Humanities Research Ethics Committee (please see addendum 1). Furthermore, arrangements will be made with all the relevant public health care service managers to notify them of the researcher's arrival beforehand. The data collected will be coded on an excel spreadsheet before being sent off for data analysis. A detailed discussion of the data collection process is provided in chapter three.

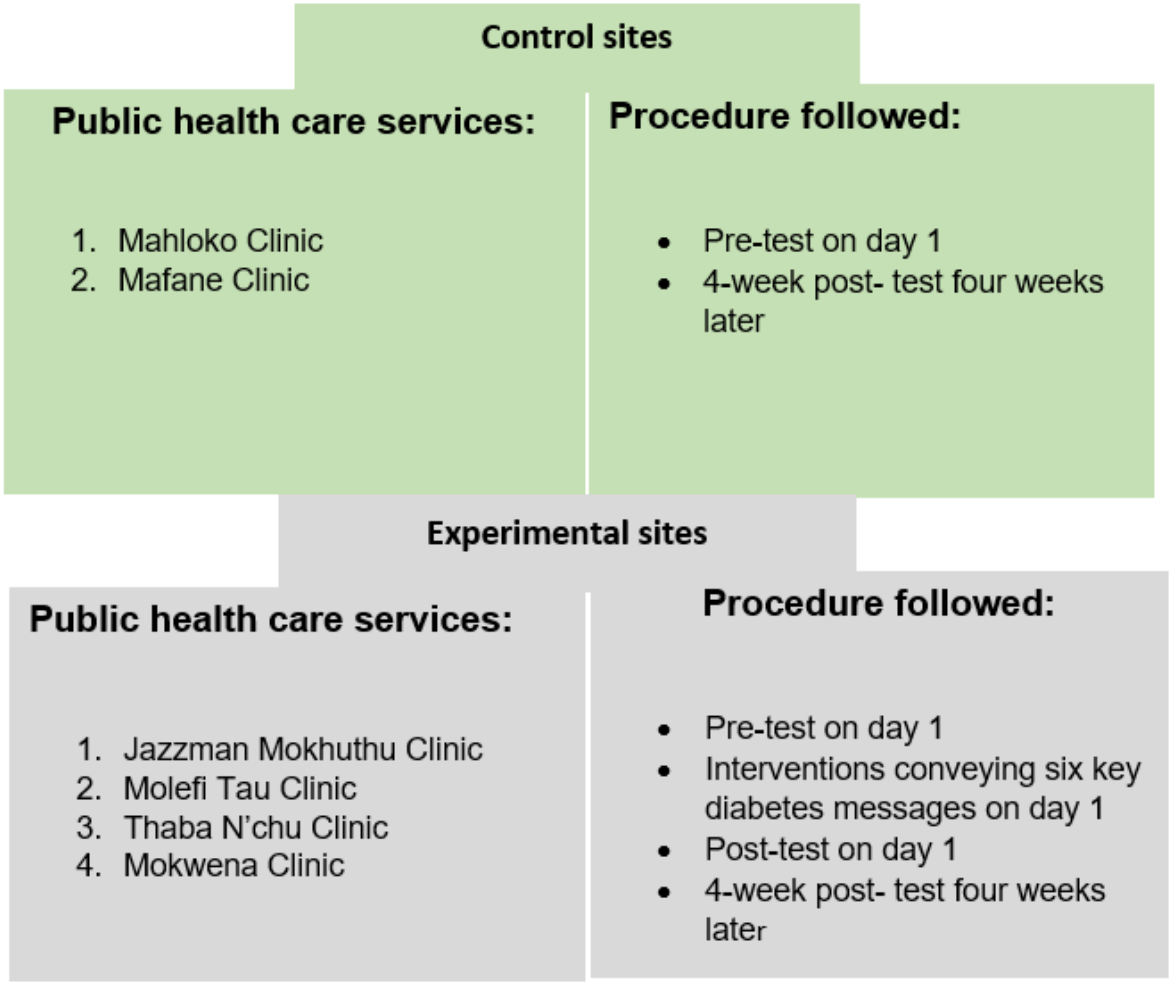

Figure 1.2: Summary of data collection phase

1.13 Data Analysis

A Biostatistician from the Department of Biostatistics at the University of the Free State will assist with the data analysis. This study will use descriptive statistics namely; frequencies and percentages for categorical data and medians, and medians and percentiles for continuous data, will be calculated per group. The change from pre to post test will be calculated and compared by means of the Kruskal-Wallis test for two independent numerical variables. Categorical variables will be compared by means of a Chi Square test and Fisher's exact test where appropriate and the change within

groups will be calculated and compared by means of McNemar's test. More details on the data analysis procedure are provided in chapter three.

1.14 Ethical Considerations

In this study, the researcher upheld the professional responsibilities and principles stipulated by The Singapore Statement, namely: Honesty, accountability, good stewardship of research on behalf of others and professional courtesy and fairness in working with others (Resnik & Shamoo 2011). The principles and professional responsibilities are discussed and applied to the study in chapter three.

1.15 Validity

The study will consider face, internal and external validity. Details on how validity will be enhanced are provided in chapter three.

1.16 Reliability

The study will consider internal and external reliability. Details are provided in chapter three.

1.17 Summary

In this chapter the background, research problem, research question and study objectives were provided. This chapter also gave a preview of the research methodology, design and technique and sampling procedures used in the study. Moreover, it was mentioned that a pilot study was conducted and the possible limitations, the validity, reliability, and the ethical considerations pertaining to the study were highlighted briefly.

Chapter two will provide an overview of the literature in relation to the study, chapter three will provide details on the methodology of the study and chapter four will present

the analysed data. Chapter five will include the discussion of results, recommendations for future studies, limitations and value of the study and will conclude by providing closing arguments.

CHAPTER 2

LITERATURE OVERVIEW

2.1 Introduction

In recent years, there has been a constant rise in the recognition of the integral role that communication plays in a health environment and in order to fulfil in this need, health communication links the domains of health and communication (Rensburg & Krige 2011: 78). Through health communication, extensive interventions that convey health related messages may be developed and used as tools for disease prevention, social development and nation building (Nag 2013:13; Sharma 2015:59; Schiavo 2016: 233). This study aims to demonstrate the role of traditional folk media to convey six key diabetes messages in order to raise awareness on diabetes in two low-middle income communities, as found in a district in the Free State.

This chapter will provide an overview of the literature reviewed which starts with unpacking the roots of communication through clarifying the concept of communication describing the communication process and discussing the importance of context in communication. This will be followed by a discussion of health communication, public health care systems with specific reference to primary health care services and the important role that the relationships between health care practitioners and their clients has on the overall health care system. Then, the chapter focuses on clarifying the concept of diabetes, its causes, related complications and strategies to address it, as it is the health issue, that the study aims to raise awareness on. Lastly the chapter reviews traditional folk media through providing a concept clarification, explains why it

is an effective mode of communication, the context in which it is used as well as how it has can applied to convey messages in low-middle income communities.

2.2 Communication Roots

Communication is at the root of human nature and it enables us to alternate between the roles of the sender and receiver. During this process the use of signs and symbols happen in order to pass on information and negotiate mutual understandings (Merrier & Logan 2011: 9; Rimal & Lapinski 2009: 247). The current section commences with a concept clarification of communication, followed by the origins of the communication process model which is accompanied by a description of the components of the communication process. Finally, a discussion on the importance of context in communication is provided.

2.2.1 Concept Clarification of Communication

The task of defining communication can be challenging because it is a dynamic term that may be expressed in a number of ways; Steinberg (2007: 39) provides a discussion of how this concept can be viewed and defined in two ways.

A technical definition simply states that communication can be described as the transition of messages from one person to another in order to reach a common understanding. Various researchers (Davis 1989: 322; Louis 1958: online; West & Turner 2014: 4 & Lunenburg 2015: 1) reiterate this view, and define communication as the total number of things that one does, in an effort to create understanding in another person's mind. Communication is the exchange of messages packaged in the form of emotions, ideas, symbols, words, letter, facts or opinions in an attempt to create mutual understandings between people. Additionally, communication is part of everyday life and is essential for human survival, the back and forth exchange of signs,

symbols, gestures and nonverbal expressions helps us to understand ourselves and how the world works (Bryan 2009: 1; Inagaki 2007: 2 & Ruben 2016: 2-3). Although this definition of communication covers the broad aspect of the concept, Steinberg (2007: 39) points out that the technical definition ignores the complexity of communication and does not take into account the role of interpretation, context nor the motivation behind the interaction because these factors have great influence on the overall meaning of the interaction exchange.

2.2.2 The Communication Process

Steinberg (2007: 69) explains that the term "process" introduces aspects of change and dynamics, which implies that each interaction is different, and since a process is ongoing and irreversible it suggests that, each encounter will have an effect on the next one. In agreement, Hawes (1973) explains that communication should not be interpreted as an action, but rather as a phenomenon that humans engage in, a multi-level interaction model where the roots of one level serve as a foundation for the next.

2.2.2.1 Components of the Communication Process

The first component of the communication process entails a *Communication need:* The communication process begins with what Littlejohn & Foss (2011: 9) refer to as the systematic process of enquiry. This occurs when people desire to satisfy their curiosity in an orderly manner. Since communication is central to human nature and humans are information seekers, the communication process begins when there is a need to transmit information in order to find out about something (Newman 2017: 6).

The second component in the process pertains to the *Sender:* The role of the sender is exceptionally important because the sender is responsible for making decisions that may have a ripple effect on the communication process if poorly taken. Firstly, the

sender is responsible for identifying and examining the recipient(s) of the message. Additionally, the sender needs to determine the communication objective(s) of the message.

Thirdly, the sender is responsible for interpreting the communication context which Hinton (2014: online) describes as an abstract idea that “dances and shifts” according to our communication settings. Within the context, the sender is subject to interpreting the boundaries of communication within various settings. In essence, the context guides the sender of the message in a number of aspects such as, whether the subject of the message is appropriate or not or whether the relationship between communicators’ predicts the message to be formal or informal. (Newman 2017:6) Furthermore, as mentioned by Ferguson (2010: online) the context guides how much background information needs to be provided and determines the content and nature of language used during a communication interaction. The context of communication helps the sender of the message to better understand how the recipient(s) of the message are likely to react to the message, which enables communicators to structure messages in ways that elicit a desired response, but are still appropriate within the communication setting.

Fourthly, the sender is responsible for determining the channel, which will be used to convey the message otherwise known as the medium or media vehicle. As aforementioned, the role of the sender is critical to the communication process especially in terms of choosing the best-suited medium to convey messages to various respondents. Choosing the correct medium is important because different mediums are better suited for different kinds of messages and audiences. If an inappropriate medium is used, the credibility of a message could be questioned which could have negative implications on how the communication is interpreted. Lastly, the sender is

responsible for composing the message. (Newman 2017: 6; Merrier & Logan 2011: 9; Steinberg 2007: 39).

The third component is the *Message:* a message can be defined as the vehicle used by a sender to convey information, feelings, thoughts or ideas to a receiver through a combination of signs and symbols. The contents of the message, verbal or nonverbal, are intended to be retrieved by the receiver in the same mental perspective as that of the sender who designed the message (Newman 2017: 7). In the event that the receiver does not decode the message in the same mental state of the sender, a high possibility of miscommunication may occur and this will be evident in the feedback that the receiver of the message provides (ibid).

The fourth component is the *Audience:* Audiences are the recipients of the message and can be a single person or a group of people that the sender directs a message to. The audience assumes the role of interpreting the message through a frame of reference familiar to them. The frame of reference often consists of previous experiences, background information and cultural knowledge, which is used to interpret these messages. These interpretations are then conveyed back to the sender of the message in the form of feedback (Newman 2017: 7; Angelopulo & Barker 2013: 8 & Steinberg 2007: 39).

During the communication process, both unforeseen and predetermined distractions could interfere with the communication process, which are termed noise. *Noise:* Noise in the communication process refers to factors that cause distractions during the stages of sending and receiving messages (Newman 2017: 74; Wood 2007: 14). These distractions manifest in the form of various communication barriers for example, faulty or problematic communication mediums, extreme temperatures , mental distractions, differences in perception, language barriers, differences in interpretations

and audio quality, amongst others which could cause misinterpretations of the sent message (Montana & Charnov 2000: 326 ; Clausen 2006 : 49).

The fifth component is *Feedback:* Ardestanizadeh (2010:1) states that feedback has one of two roles in the communication process. Firstly, it gives information about the decoding process and secondly it gives information about the reliability of the medium used to convey messages (Merrier & Logan 2011: 9; Steinberg 2007: 39). Once the audience has interpreted the message, the feedback becomes the "new message" which serves as a foundation of, and gives life to, a new cycle in the communication process (Hawes 1973).

2.2.3 Communication Context

As noted previously, context refers to the setting, amongst others, in which communication occurs and has an effect on the overall communication process. Since communication is always, contextual, Steinburg (2007:51) states that it is important that researchers in the field of communication are always sensitive to the context in which communication occurs. It must be kept in mind that the ideas, belief systems, values, norms, physical and mental states of sender(s) and receiver(s) all contribute to the context of communication. Moreover, the relationship between conversational partners and the degree of shared knowledge are also factors that contribute to the communication context (Ferguson 2010: online). These factors, among others are the cues that make up the overall communication situation and change the dynamics of communication in terms of what is appropriate and what is not (Barkhuus 2003: 3).

In the field of health communication, practitioners need to be sensitive towards the differences among people's educational levels, reading abilities and cultural belief systems with regard to particular illnesses and curing methods.

In accord, Hinton (2014: online) mentions that although the concept of context is abstract; if neglected, the consequences result in concrete challenges. Adair, Buchan, Chen and Lui (2016: 199) describe the context as a shadow of communication that advocates the “unspoken, unformulated” rules that guide how information should be managed during communication interactions. Context is compared to a shadow because just as humans are inseparable from their shadows, so is context from communication. Furthermore, context is not explicatory in nature meaning the implicit “shifts and dances” (Hinton 2014: online) of context from one setting to another are often deeply rooted in culture and are expressed and transferred through cultural norms and values. Therefore, diagnosing the correct communication context plays a pivotal role in achieving communication goals because it serves as a benchmark for conveying and interpreting meaningful messages accurately (Adiar 2016: 109; Merrier & Logan 2011: 9).

Hall (1976: 89) states that, “Without context, the linguistic code is incomplete since it encompasses only part of the message”. Therefore, the use of strategic communication, which emphasises context sensitive messages can be seen as the golden thread that transpires through countless channels, while serving as a bridge that connects various communication contexts. These include but are not limited to economic, health, political and cultural systems that link indigenous ideas of knowledge and science thus making it possible to complete the “linguistic code” (Bryan 2009; 1; Inagaki 2007: 2 & Steinberg 2007: 51).

The nature of the research problem, pertaining to this study as mentioned in chapter one, characterises this study within a health communication context. Therefore, a discussion on the concept clarification of health communication and the context in which it is used is provided below.

2.3. Concept Clarification of Health Communication

Health communication can be understood as a system where information regarding health related matters is transmitted to different audiences with the purpose of influencing, interacting with, and supporting individuals, communities, health professions, special groups, and the public to introduce a behaviour, practice, or policy that will ultimately improve health outcomes through using multi-layered and multi-disciplinary approaches (Harrington, 2015: 8). Thomas (2006: 2) and Rimal and Lapinski (2009: 247) describe health communication as the link between the spheres of communication and health that plays an instrumental role in contributing to all aspects of disease prevention, and is often found in the form of intervention efforts with the purpose of changing behaviours through communicative acts. Furthermore, health communication is one of the strategic tools needed to assist development workers, communication practitioners and health practitioners to develop, launch and sustain effective initiatives; that use a variety of communication techniques and devices to promote health communication messages (Rimal & Lapinski 2009: 247).

Thompson, Parrott and Nussbaum (2011: 121) are in support of the above-mentioned interpretations of health communication but suggest the concept be revised to include biographic information about audiences such as “personal, social, societal and spiritual well-being” (Thompson, et al 2011: 121). This way, researchers, health care workers and communication practitioners can better understand the manner in which people fathom and adapt to health communication at individual and collective levels. Once health practitioners better understand the manner in which different people internalize health related information, practitioners can engage with target audiences in various health communication contexts through ongoing interactions in order to reach mutual understandings (Rensburg & Krige 2011: 78).

According to Green (2017:1) South Africa is in need of community based programs that include the community in the all the phases of health communication programs that aim to promote prevention against the increase in non-communicable diseases and other health related conditions. This can be achieved through the application of strategic communication which O'Sullivan, Yonkler, Morgan and Merritt (2003: 14) define as the "programs steering wheel, which guides it towards the communication goals and serves as the glue that holds the program together". This approach requires health communication practitioners to adopt a participatory community based approach to health communication that takes contextual elements into account and fosters better understanding for both the target audiences' and health communication practitioners (ibid). Moreover, health communication practitioners must recall that there are no quick fixes. Health communication is a process that evolves and empowers people through ongoing interactions that foster the buy-in of target audiences and relevant stakeholders over time (Schiavo 2016: 233). In order to provide contextual understanding of how the study fits into health communication, a discussion of the domain is explored ahead. However, before proceeding ahead, for further contextualisation, it needs be noted that this study overlaps into the domain of Development Communication[2] for a number of reasons.

Firstly, similar to health communication, development communication makes use of strategic procedures to convince people to make informed changes in order to improve their overall quality of life.

Secondly, health communication, like development communication aims to stretch people's perspectives, lessen the idea of isolation and reduce the negative impacts

[2] Development communication can be described as the use of communication strategies to facilitate sustained social and behavioural changes through stakeholder engagement activities (Servaes 2008: 14).

caused by diseases, which, in turn improves their quality of life. Thirdly, health communication is developmental because it represents an evolution of growth and presents means for change to achieve better health, social, economic and cultural conditions. Lastly, health communication is developmental because it is participatory and it emphasises the role of the community and culture in addressing health issues (Durden & Govender 2012: 71).

As a result, the communication channels used in this study; namely traditional folk media (discussed later) differ from the traditional mass communication media channels that often give voice to strategies applied in Health Communication research (Wood 2007: 35).

The role of communication in health is imperative and is defined by two underlying characteristics. Firstly, the role of communication in health is developmental because the messages conveyed through health communication strategies are intended to empower audiences with knowledge, in order to make better decisions regarding their health, thus developing individuals and those around them. Secondly, the role of communication is instrumental in health because the knowledge needed to change attitudes and perceptions regarding health issues, is conveyed through communication (Schiavo 2016: online; Tomaselli & Chasi 2011: 295). Furthermore, Harrington (2015: 87) points out that without adequate and efficient communication it would be difficult to convey health related messages, run health care systems or complete any health related assessments or surgical procedures.

The discussion below provides a description of the context of health communication, which includes the five focus areas that health communication intervention strategies should aim to focus on when conveying health related information to target audiences (Thomas 2006: 3).

2.3.1 Health Communication Context

Health communication messages can be conveyed to target audiences using different communication strategies and can come from various entities such as government institutions, Non Profit Organisations or corporations in the private sectors, amongst others (Rensburg & Krige 2011: 78).

The setting in which health communication messages take place, describe the physical context of the health information being conveyed and determine the most appropriate communication strategy (ibid). In order to fully understand the context of health communication, O'Sullivan, Yonkler, Morgan and Merritt (2003: 14) suggest that health practitioners need to look beyond the information and tap into the audiences' environments. More often than not, health communication practitioners have trouble with fully understanding the context in which target audiences function. This leads to developing health communication initiatives that lack the ability to generate long-term program sustainability, which Freimuth and Quinn (2004: online) state as one of the main purposes of health communication programs.

Thomas (2006:3) on the other hand points out that health communication can take place at several focus areas and suggests that researchers should identify the desired focus area of their health communication efforts during the planning phases of their communication strategies. However, researchers should look into using communication strategies that target the desired focus area; but still have the potential to influence other focus areas (ibid)

Health Communication Focus Areas:

The Individual: The individual is the most significant recipient when it comes to health communication for the primary reason that, an individual is responsible for executing behaviours that affect their health. Communication strategies at this level need to

make use of health communication that will affect the individual's attitudes, self-efficiency, awareness knowledge, beliefs and practices (Thomas 2006:3; WHO 2017:1; Dutta 2008: 50).

Social networks: Wright, Sparks and O'Hair (2015: 95) mention that when people encounter health communication messages they often resort to their societal networks for some type of social support. A social network refers to the various groups with which an individual identifies with or belongs to, for example family, friends, colleagues, religious groups or even online groups like blogs or a Facebook page (ibid).

Thomas (2006:3) and Obregon and Waisbord (2012: online) state that an individual's relationship with the various groups within a social network can implicate their health. Wright, et al (2015: 96) explain that people's interpretations of the health communication they have been exposed to, is influenced by the interpersonal interactions that occur between an individual and the various groups to which they belong. Therefore, researchers that want to target social networks should consider approaching opinion leaders within the social network as a starting point (Thomas 2006: 3).

Organisational: Thomas (2006: 3) describes this focus area as "formal groups with defined structures" Wright, et al (2015: 156) suggest that this level should be seen as a systems approach to communicating health communication because messages communicated on this level have the potential to spread to other focus areas. For example, if an organisation has an employee wellness day that focuses on raising awareness on the dangers of high sugar consumption. Inevitably, the individual working for the organisation will be exposed to the information; they may then pass the information on to their friends and family or upload a blog post on the newly found

information. The organisation in itself could for example be impacted in the sense that new policies that promote positive health choices are introduced (Thompson, et al 2011: 122). An example could be introducing a rule stating that carbonated beverages will no longer be sold at the company canteen, or increasing the price of carbonated beverages to discourage employees from purchasing them.

Community: Conveying health related information to communities involves using planned community-based initiatives to remove structures that influence poor health management and introduce those that will support healthy lifestyles (Thomas 2006: 3). A participatory approach that entails collaborating with bodies that have the potential to influence health for example, schools, churches and primary health care services should be adopted by researchers that seek to impact this level (Schiavo 2016: 234).

Society: This focus area encompasses the features of all the above-mentioned focus areas and brings in the concept of cultural diversity in health communication. Researchers targeting this level must understand that societies have different beliefs about health issues because of the various norms, values, attitudes and the political, cultural, physical environments to which they belong (Thomas 2006: 3; Wright, et al 2015: 156; Schiavo 2016: 234). In agreement, Du Plessis and Sundar (2011: 159) state that any initiatives that are related to health or development must adopt a sense of participation, accountability and transparency in order to ensure project sustainability. Therefore, Rimal and Lapinski (2009: 247) suggest that the channels through which health communication information is conveyed to audiences should be contextualised in such a way that they integrate the indigenous knowledge, values, attitudes and beliefs of the broader community. Health communication programs that fail to address the above noted have proven to be unsuccessful, for example using

one-way mass media communication strategies like, making public announcements on posters, radio and television or handing out information brochures in public health care services among others have achieved limited success (Rensburg & Krige 2011:80; Prilutski 2010: 51).

Apart from conveying health related issues in affected areas, health communication studies have been used in to enhance relationships between patients and practitioners in clinical settings (Blackstone & Pressman 2015: 69). Health communication studies have also been used to enhance professional relationships between health care workers as well as improve patient self-management initiatives through effective communication strategies (Thomas 2006:3). These relationships need to be nurtured because they are instrumental in improving overall public health care systems, which are discussed below (Thomas 2006:3; Blackstone & Pressman 2015: 69).

2.4 Public Health Care Systems

Ideally, all countries should have comprehensive healthcare systems that provide and adhere to the principles of primary health care services coupled with an adequate number of healthcare providers (Vasuthevan, & Mthembu 2016: 60). Over the past decade immense strain has been placed on healthcare services all around the globe, due to a rise in the number of people around the world with acute illnesses and chronic diseases which had necessitated the need for immediate remedial interventions as noted previously (Green 2017: 1). Furthermore, Vasuthevan and Mthembu (2016: 60-63):7) describes a comprehensive public healthcare system as one where “people have access to maximum health care benefits at relatively low costs. A system where individuals are seen as belonging to a family and a community which operates in a specific social and physical environment from which they are inseparable and which

has profound influence on their health". Such a system should provide primary health services (ibid).

2.4.1 Primary Health Care Services

Primary health care services can be defined as "essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation, and at a cost that the community and the country can afford" (Vasuthevan & Mthembu 2016: 61). Primary health care services should, according to the WHO (2018: online) adhere to a number of principles such as:

- be shaped around the life patterns of the population and meet all the daily health needs of the community;
- integrated with other services concerned with community development, such as agriculture and educational services and communications;
- allow local populations to be actively involved in health care activities;
- use an integrated approach and promotive, preventative, curative and rehabilitative services should be available;
- have systems in place that make treatment as simple as possible, and should be carried out by health workers who have been suitably trained to perform such treatment; and
- be adequate facilities for prompt and efficient referral.

Furthermore, the WHO (2018: online) insists that primary health care is not limited to the treatment of diseases alone. Instead, primary health care is about caring for the community at heart. In agreement, Shi and Singh (2008: 251) state that primary health care is community based and that specialised medical practitioners cannot solve health problems alone; instead, community social networks should become part of

improving health care. One of the extended elements in the 21st century for primary health care among others include health promotion, which the WHO (2017: online) describe as the process of allowing people to have greater control over improving their health. Health promotion places less emphasis on individual behaviour and focuses on a wide range of environmental and social interventions (Shi & Singh 2008: 251).

The next section of this chapter provides a discussion on health care practitioners and their role in public health care systems as well as the perceptions of practitioners and patients regarding health care systems.

2.4.2 Perceptions of Health Care Practitioners and Patients

Health care practitioners are responsible for delivering comprehensive health service, which entails the promotion of physical and mental health, the prevention of illness and early detection of disease (WHO 2016: online). Additionally, Vasuthevan, and Mthembu (2016: 62-63) point out that health care practitioners' most critical role is to build relationships, support families in times of stress and supply information about community resources and social services that are available in the community. In the South African public health care system, such relationships are under extreme strain and are almost non-existent (ibid). Health care services are often overflowing with patients resulting in health care practitioners not having enough time to effectively communicate and build relationships with their patients.

The South African Market Report Future Health Index (Philips 2016: online) investigated South Africa's' future health index (FHI) which is a method for identifying a perceived point of reference for how equip a country is for dealing with emerging healthcare challenges. This report focused on identifying the perceptions of health care practitioners and patients on South Africa's' health care systems and the results

indicate that some of the biggest barriers in the South African health care system are limited resources, lack of staffing and education as well as insufficient funds. When compared to the 13 other countries that were part of the FHI study, South African citizens had the worst perceptions of their public health care system. In addition, health care practitioners emphasised that in South Africa, access to public health care services and access to private health care services are on extreme ends of the continuum. Consequently, this leaves those that make use of public health care services at a disadvantage.

Statistics from the above-mentioned study confirmed that when patients were asked where they receive vaccinations, treatment and advice about healthy living, over 50% of the responses were “at clinics” which refers to primary public health care services and the only time patients use the hospitals is during an emergency or an accident scenario. In light of this, Schiavo (2016: 233) states that “health equity is a key issue of our time” and it is important to use effective communication strategies to remove barriers and find pathways that will foster an all-inclusive society, seal the gap among different people and ensure that everyone has equal reach of social and health improvements.

In addition to the above-mentioned challenges within the South African public health care system, in 2015 it was reported that South Africa had the highest prevalence of people being diagnosed with diabetes at an estimated four million across the various primary health care services in South Africa (Statistics SA, 2017). These alarming numbers pushed diabetes in third place, in the top ten causes of death in South Africa (ibid).

2.5 Diabetes

Diabetes is a chronic disease that is characterised by an increase in plasma blood glucose otherwise known as hyperglycaemia and has two common types namely: type 1 and type 2. This study will focus on type 2 diabetes which occurs when your body loses its function to allow glucose to enter your body and for you to use it for energy creating insulin resistance (American Diabetics Association: 2004; Ary, Jacobs & Irvine 2013: 800 & Senadheera, Ekanayake & Wanigatunge 2016: online). The current section will commence with a discussion on the prevalence of diabetes, which is led by a description of the etiology, complications of diabetes and strategies on how to address the pandemic.

2.5.1 Prevalence of Diabetes

Diabetes Mellitus Type 2 is a universal health problem with increasing prevalence globally and the burden of this disease is increasing at a concerning rate (WHO 2016: online). This condition affects more than 380 million people worldwide (WHO 2016: online). In 2015, five million lives were claimed by diabetes and every six seconds someone dies from this condition (International Diabetes Federation (IDF) 2017: online). It is also estimated that by the year 2030 the number of deaths caused by diabetes will double (WHO 2016: online).

Alarming reports indicate that Africa is proposed to have the highest number of people living with undiagnosed diabetes with estimations that 1 out of two people (46%) who suffer from this condition are undiagnosed (IDF 2017: 115).

What is even more alarming being that in South Africa 3.68 million people out of a population of 52.38 million which was reported in 2015 are expected to be affected by diabetes and despondently estimations indicate that 1.39 million of those people are

undiagnosed and do not know they are living with the condition. In addition, research indicates that most of the people living with diabetes are from low-middle income communities where awareness levels of diabetes are significantly low (IDF 2015: 115).

Diabetes is considered a lifestyle disease, correlations between obesity and type 2 diabetes have been established, which means type 2 diabetes can be prevented through practicing healthier lifestyles (IDF 2017: 115). In sub Saharan Africa, South Africa has the most number of obese and overweight people, over 70% of females and a third of the men in the population are classified as overweight or obese (Statistics SA 2016: online). Statistics indicate that there is high prevalence of diabetes in low-middle income communities and one of the reasons for this could be the transition from traditional to urban ways of living (Health.org 2016: online).

In some of the low-middle income communities the ability to indulge on processed foods and use transport systems to get around, as opposed to eating healthy home cooked meals and walking to places is a symbol of personal and material success (Maina, et al 2010: 2). These “advances” however come with increased weight gain and obesity, which in turn can cause diabetes (ibid). Diabetes is said to take more lives than HIV and breast cancer combined, in addition it is the leading cause for blindness, amputation, heart attack, stroke and kidney failure which introduces complications to not only those affected by it and their families, but also to economic and health structures (WHO 2016: online).

2.5.2 Complications Caused by Diabetes

The increasing numbers diabetes diagnoses do not only place strain on the families of those affected by diabetes but also greatly affect the economy and public health care systems. It is reported that it costs approximately R 26 443.99 to treat one diabetic

patient per year, which means over 620 billion USD are spent on treating diabetes annually. Despite the aforementioned, there are still people who do not have access to the necessary medication and do not receive diabetes treatment (IDF 2017: 115). Conversely, many studies have established a link between depression and diabetes for example Holt, de Groot and Golden (2014: 290) found that diabetes and depression are paired together twice as often, than by chance. The prevalence of comorbid depression and diabetes has been around for several years, researchers have detected that patients suffering from diabetes are likely to suffer from depression as well (Mendenhall, Norris, Shidhaye & Prabhakaran, 2014: 277 ; Campayo, et al 2010: 27; Holt, et al 2014: 491; Talbot & Nouwen 2000: 1556).

Approximately one in four patients with diabetes are affected by depressive symptoms, however the symptoms seem to be more prominent in patients with type 2 diabetes as opposed to those with type 1 (Anderson, et al 2001: 1072; Holt, et al 2014: 491). Interestingly other studies suggest that patients with diabetes experience diabetes related distress which can be described as an emotional response to the demands of living with a chronic health condition and should not be confused with clinical diabetes (Domingo, Asmal, Seedat, Esterhuizen, Laurance & Volmink 2015: online; Ramkisson, et al 2016: 6; Mendenhall, et al 2014: 277).

Ramkisson, et al (2016: 37) found that levels of distress were higher in patients that were unemployed, those who attended treatment at public health care facilities and those who were diagnosed at an early age. Furthermore, Ramkisson, et al (2016: 6) explained that it makes sense for symptoms of distress to be higher in these groups. Firstly, being unemployed makes getting access to medication and sticking to a healthy balanced diet challenging. More often than not, in such cases, the primary

concern is ensuring that there is food on the table; very little thought is put into the type of foods suitable for a diabetic patient.

Secondly, it is anticipated that patients who attend and receive treatment at public health care services may show signs of diabetes related despondency. Ramkisson, et al (2016: online) mention that because patients do not see the same health care practitioner at each visit; due to the overwhelming workload experienced by the health care practitioners and supporting staff. Building patient-practitioner relationships where patients may be comfortable disclosing their concerns becomes challenging and such circumstances make it difficult for health care practitioners and health care workers to give individual attention to patients in a compassionate and emphatic way.

Studies also indicate that lack of social support and public opinions of diabetes contribute to symptoms of depression amongst people with diabetes and those suffering from diabetes related distress. Moreover, studies indicate that once symptoms occur, they worsen as patients experience diabetic related complications over time making it difficult for patients to regain control of their lives and placing emphasis on the need for strategies to address diabetes (Abdoli, et al 2012: 370; Campayo, et al 2010: 27; Talbot & Nouwen 2000: 1559).

2.5.3 Policies to address Diabetes

The South African Department of Health has come to realise that health promotion strategies and policies need to focus less on the individuals but rather target social networks and community norms in order to embed behavioural and attitude changes in the culture of South Africans (National Department of Health 2014: 7). Thus, the Department of Health released The National Health Promotion Policy and Strategy 2015-2019 in 2014, which has strategies in place to develop and promote frameworks

for health promotion interventions in South Africa. In partnership with civil society, food control, non-governmental organisations, other government sectors, academia and research institutions, the Department of Health aims to decrease the percentage of obese people in South Africa's population by 10% by the year 2020 (National Department of Health, 2014: 18–20). In accordance the Department of Health's long term strategic plan for 2014-2019 states that the prevalence of non-communicable diseases should be drastically lowered by the year 2030 (National Department of Health, 2014: 13).

The Department of Health intends to achieve this through targeting the youth and older people in health promotion programs that focus on promoting healthy lifestyles, including education on proper nutrition and physical activity. Currently strategies such as the National Obesity week in October, which presents a different theme every year to create awareness around unhealthy lifestyles until the build-up of National Diabetes Day in November, are available. However, these strategies are not sufficient, there is still a need for more health promotion initiatives to spread knowledge and create awareness on diabetes (National Department of Health, 2014: 7). Furthermore, the Department of Health commits to creating supportive environments that will promote longevity, positive lifestyle changes and efficient self-management of chronic diseases (National Department of Health, 2014: 18). Additionally, The National Health Promotion Policy and Strategy 2015-2019 states that the Department of Health will advocate organisations that incorporate the promotion of healthy eating habits, increased physical activities, effective life skills and the screening of chronic diseases of lifestyle such as diabetes and hypertension in their organisations (National Department of Health, 2014: 19–23). These organisations include, but are not limited to, schools, higher education institutions and labour unions.

Organisations such as The Heart and Stroke Foundation have hosted various campaigns in an attempt to create awareness on the dangers of being overweight and encourage healthy lifestyles but South Africans are yet to show interest in changing their ways (The Health and Stroke Foundation South Africa 2017: online). This demonstrates that there is a dire need for health interventions that will not only educate people, but also speak to their hearts and minds and hopefully influence attitudes and practices (Ng, et al 2012: online).

2.6 Traditional Folk Media

Traditional folk media has been around for centuries and can be described as a vehicle for social change and nation building because it has the ability to break through barriers and overcome the difficulties of language, perceptions, interpretation and attitude while reaching out to audiences in the simplest forms (Kumar 2006: 95). The current section will provide a concept clarification of traditional folk media, describe the context of traditional folk media, and explain why it is an effective mode of communication and how traditional folk media can be applied in various contexts. Lastly, a description of the different forms of traditional folk media is provided.

2.6.1 Concept Clarification of Traditional Folk Media

Wang and Dissanayke (1982: online) define traditional folk media as a communication system that is deeply rooted in a culture and has been present before the age of mass media but is still considered a vital mode of communication despite modern advances. In simpler terms, Sharma (2015: 59) defines traditional folk media as a communication method for transmitting knowledge and wisdom from one generation to another.

Clift (1990:172) confirms that traditional folk media has been used to communicate various messages like cultural beliefs, norms and value systems and health messages

amongst others in rural and low-middle income communities for a number of years. Mundy and Compton (1991: online) and Mishra and Newme (2015: 1) define folk media as indigenous equivalents of mass media that use performance arts to entertain, promote education and reinforce values and cultural continuity in communities. Traditional folk media like storytelling provide a complete emotional experience that create a repetitive state where messages can be passed on effectively to spread health messages in a community (Kumar 2006: 94). Folk songs on the other hand are often accompanied with folk dances, which are distinct from classical urban dances that have been choreographed with timed and technical moves in order to create a fine piece of art (ibid).

Traditional folk dances are raw and expressive in nature, each culture has a different type of folk dance which is accompanied by it respective outfit and is most commonly used to express elation (Kumar 2006: 95; Mishra & Newme 2015: 3). Traditional folk dances are intriguing, they capture the attention of audiences and promote participation among locals but most importantly evoke a sense of belonging and cultural pride amongst performers and audiences (Kumar 2006: 96).

Much like folk storytelling and song and dance traditional folk poetry also makes use of a strong emotional appeal but has the ability to tap audience's intellectual senses which is why it is best used to convey new ideas that are still culturally appropriate (Ritu 2010: 1). Traditional folk media is persuasive in nature and its close link to culture makes it an effective mode of communication that is able to establish rapport with the masses (Kumar 2006: 93).

2.6.2 Traditional Folk Media as an Effective Mode of Communication

Sharma (2015: 61) provides seven characteristics that signify traditional folk media as an effective mode of communication especially in low-middle income communities with low literacy levels, such characteristics include:

- its proximity with the community in both structure and content;
- signs and symbols not foreign to the people making it easier to understand and process messages;
- no levels of literacy are required, understanding and interest are maintained through its simplicity;
- explaining modern concepts through indigenous forms of communication;
- enhancing interactive skills through group tasks, and reinforcing unity in a community through elements of participation;
- not distancing itself from the community, it is creative and changeable in nature, makes it easier to modify symbols, and gestures to accommodate various cultural contexts; and
- taking place on a face-to-face basis making it easier for practitioners to get immediate feedback and read the non –verbal symbols of respondents.

In light of the above noted, the next section will provide clarity on the context in which traditional folk media is used.

2.6.3 The Context in which Traditional Folk Media is used

Traditional folk media comes in different forms, Nag (2013:12-13) classifies the different forms of folk media into four categories and describes the specific types of folk media found in each category below.

Firstly, traditional folk media can be found in the form of *oral traditions*, which entails expressive arts such as songs, theatre, poems, and rhymes among others. Secondly traditional folk media can be found in the form of *material culture* which entails visual aspects of folk behaviour such as skills used to create crafts, clothes, architectural designs and other types of skills and machinery. Thirdly, it can be found in the form of *social folk customs*, which include observing traditional life from a community perspective rather than focusing on individuals. It involves market occasions, ceremonial gatherings, death, birth, marriage and annual festivals. Lastly, folk media can be found in the form of *performing arts*, which includes traditional music dance and drama (Nag 2013: 12-13).

Kumar (2006: 95), comments on the fact that folk media such as song, dance, music, theatre and poetry amongst others have been used historically in villages as communication mediums to share moral, socio-political and religious messages. This is a trusted communication channel, especially in rural communities (Du Plessis & Sundar, 2011:169). It provides an ideal channel to encourage participation its visual, auditive and interactional nature and has been used to carry messages of development and change (ibid). Folk media's fluid nature enables it to borrow elements from anywhere without prejudice giving it an advantage over other forms of communication mediums (Kumar 2006: 95).

Even though it is without doubt that mass media has an effect on large parts of the world and has also been used to communicate health messages in the form of edutainment campaigns as mentioned previously (Durden & Govender 2012: 71). Folk media still stands powerful because it links culture and performance together to send across messages of social development (Clift 1990: 172). Although its reach may be limited in comparison to mass media, traditional folk media portrays the belief systems

of indigenous culture making it an integral part of the development process because of its widespread potential to convey effective communication (Kumar 2006: 95). Meaning traditional folk media's use in development projects broadens the possibility of success because of its inherent ability to break through cultural margins. Moreover, traditional folk media has the ability to merge cultures through song and dance, music, storytelling and poetry among others (Sharma 2015: 60). However, Chapeke and Bhagat (2006: 132) highlight that practitioners need to be aware that communities across various cultures around the world have significant communication patterns, which more often than not, are context bound, and contribute to the organisation of social structures within the community. Each community has its own traditional folk media, understanding this plays an integral role in the process of motivating a community in a desired direction (Mishra & Newme 2015: 1).

Storytelling has been used in rural parts of India to mend the gap between different rural areas and between different rural and urban areas by using storytelling to create awareness and promote social change (Kumar 2006: 94). In agreement, Mathiyazhagan, Kaur, Ravindhar and Devrani (2015: 162) state that today people want to listen to stories that are close to their realities rather than those that are from the past, which is why this form of folk media has proven to be an effective communication method for social development.

Moreover, traditional folk media has also been used during struggles (Mishra & Newme 2015: 3) in the form of folk songs. These are very popular and have played major roles in transmitting developmental messages to locals and if used accordingly, can prove to be effective ways for promoting social change and nation building (Kumar 2006: 94). The intense melodic exchange during a performance of folk song creates the sense of a break from the seriousness of life and serves as “comic relief “for

audiences even though the content in the lyrics may be related to serious issues that the audiences are experiencing (Mathiyazhagan, et al 2015: 162). Folk songs do not require studios and formal settings to be composed, locals may come together and start singing about their shared realities and such songs are passed on from generations to generations (Ritu 2010: 1).

An example of this flexible nature can be seen in the historic songs that unite masses during protests in South Africa. These songs were composed by protestors in the 1960's based on the struggles that they experienced in their communities. These songs have been passed down generations and are still used today to communicate the various struggles that the communities or people protesting are experiencing. For example, the song titled "Senzeni na?" meaning "What have we done?" was sung by the youth of 1976 during their protests against inequality and was also chanted across South African universities during the 2015\2016 #FeesMustFall protests (Mati 2016: online; Nkoala 2013: 52 & News 24 2017: online; Xulu 2016: 23).

This gives a clear indication of how folk songs are most persuasive and can be adapted to any given theme; making them a popular form of traditional folk media where the content of the song may contain a new message that suits the current time and needs of the people (Kumar 2006: 94; Nkoala 2013: 52; Xulu 2016: 23).

On the other hand, scholars like Mohanty and Parhi (2011: online) indicate that the use of folk media in communities does not only increase community participation, spread information and entertain but it also helps in raising awareness when used to educate people about health and nutrition issues. Using traditional folk media may have a positive effect on the outcome of health programs. This is according to various scholars (Panford, Nyaney, Amoah & Aidoo 2001: 1560) who found that the use of traditional folk media to convey HIV prevention information in a community with low

literacy levels had a positive influence on community members with regard to HIV prevention. In agreement, Chapke and Bhagat (2015: 124), Jinadasa (2011: 6) and Mohanty and Parhi (2011: online) reiterate that the use of traditional folk media as a communication tool in rural development projects has positive correlations with the community accepting suggested developments.

Folk media's potential to spread educational health messages has led to collaborations between health communication practitioners and stakeholders such as government, public health care services and members of communities that are affected by the effects of poor nutrition and lack of information regarding the specific health problem that has been identified in that community (Prilustiki 2014: 51-22). In addition to that folk media allows health communication practitioners to design messages in languages that the locals of that specific community will understand; furthermore, research has proven that members of low-income communities are more likely to trust messages that are delivered through folk media over those that are delivered through other channels of mass media (Kumar 2006: 94).

The above mentioned forms may be used in conjunction but the performing arts and oral tradition are most popularly used for development and health communication because of their strong ability to instantly appeal to the masses (Sharma 2015: 13).

2.7 Summary

The process of communication is as old as humankind and it role in health systems is more than critical (Blackstone & Pressman 2016: 69). This chapter reviewed the roots of communication with specific reference to the communication process and context. Furthermore, the concept of health communication was described as well as the context of health communication and the specific focus areas that researchers can

tailor their health communication efforts towards. Moreover, a description of the Public Health Care System was provided as well as the characteristics that Primary Health Care Services should adhere to and the perceptions of patients and health care practitioners on the health care context. The concept of Diabetes as a non-communicable disease that has placed a lot of strain on health care systems was described and the causes, complications and strategies used to address the pandemic were unpacked. In conclusion, traditional folk media was described as an effective mode and communication, followed by a discussion on the context and usage of traditional folk media and the different forms it comes in.

Specifications on the methodological procedures followed, to investigate the research problem are provided in the chapter to follow, which will then be followed by a chapter on data analysis and interpretation and a concluding chapter.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Based on the literature discussion in chapter two, it seems that health communication strategies that focus on diabetes related messages, which reach community-wide, could be a useful tool in an effort to relieve the burden of non-communicable diseases on South Africans and the South African health care system. Consequently, this study focused on using traditional folk media in the form of interventions to communicate six key diabetes messages with the aim of raising awareness amongst community members in Botshabelo and Thaba 'Nchu in the Free State. This chapter provides a methodological framework of how the researcher approached the investigation as well as methods used to address the research problem, research question and objectives as noted in chapter one. Details on the choice of methodology, research design, variables to be studied, population and sampling, the pilot study as well as data collection and analysis methods are given. The chapter concludes with addressing issues of reliability and the validity as well as the ethical considerations pertaining to the study.

3.2 Research methodology

There are three broad research methodologies that researchers can use to conduct their studies, namely: a qualitative, a quantitative or a mixed method design approach (Du Plooy-Cilliers, et al., 2014: 26; Walliman, 2005: 16–18). The selected approach however, should be related to and guided by the research problem in question. For

this study, a quantitative approach was chosen because the objectives that need to be realised in order to answer the research question, entail measuring various phenomena. Since the quantitative approach mainly emphasises the quantification and measurement of data it was deemed appropriate to satisfy the research question as stated in chapter 1. The study was conceptualised as a quantitative quasi-experimental pre-test post-test design. This design also informed the data collection and analysis procedures.

3.2.1 Quantitative Design

Quantitative research findings are normally reflected as numerical data. In this study the results will be provided as nominal data that are used to describe respondents' possible change in awareness levels in the pre-test post-test reflections on diabetes after an intervention, as well as to measure a possible trend after four weeks through a 4-week post- test assessment.

Generally, the overall purpose for a quantitative study is to generate objective meanings through data that can be observed and measured through variables so that researchers can understand and predict phenomena in order to control it (Williams 2007: 66; Bacon-Shone 2015: online). The pre-test, post-test and 4-week post-test generated numerical data that the researcher could observe and contrast in order to establish if there was a difference in awareness levels of diabetes between the assessments. The main characteristics of quantitative research include reporting on findings from the outsider's perspective, which is why systematic processes during data collection and analysis are of utmost importance (Botma, et al 2010: 82; Williams 2007: 66; Sukamolson 2007: 41; Creswell 2012: 63). With this in mind, the researcher used structured questionnaires as a data collection technique, which enabled the researcher to collect data objectively. Furthermore, the data was analysed statistically,

which in essence aligns the study to the main characteristics of the chosen design approach.

3.2.2 Quasi-experimental research design

Welman, Kruge, Mitchell and Huysamen (2005: 88) describe a quasi-experimental design as an approach that is used when a researcher is unable to use random assignment of respondents to groups and may or may not include control groups. In agreement, Salazar, Crosby and Diclemente (2015: 136), note that by definition "quasi" means "as if or almost" implying that it is almost like true experimental research. The study adapted a quasi-experimental design because it enabled the researcher to make use of a control group, which in turn made the study more rigorous and enabled the researcher to draw conclusions on the nature of this phenomenon more confidently. Additionally, respondents were not randomly assigned to groups because the study aimed at raising awareness within the larger community and not among a specific group of respondents. Sabawal and White (2014: 1) mention that although this approach lacks randomisation, researchers still have control over "assignment conditions" meaning that they have the opportunity to choose which respondents will be exposed to the interventions and which will be part of the control group or in some cases, this process may be self-selective by respondents.

One of the requirements of quasi-experimental design is that the control and experimental group should share a significant number of characteristics in order to ensure that they are as similar as possible, for the purpose of the baseline data, which will be collected prior to the intervention (Sabawal & White 2014: 1). For this reason, the primary health care services that were used as control and intervention sites were comparable concerning demographic profiles. Additionally, the primary health care services in the control and intervention group provide the same health care services

by personnel who have undergone similar training processes and are managed by structures within the Free State Department of Health.

The Classical Quasi-Experimental Design commonly known as the Non-equivalent Control Group Design was adapted by the researcher and can be graphically represented as follows:

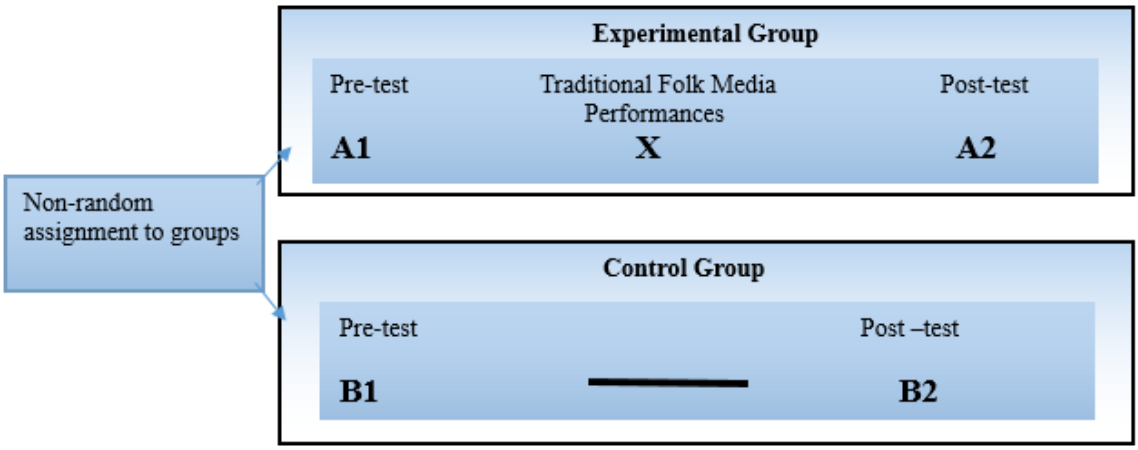

Figure 3.1: Diagram representing the Classical Quasi-experimental design

3.2.3 Pre-test Post-test Design

The classical quasi-experimental design is a blend of two research designs namely; the One Group Pre-test Post-test design and the Pre-test Post-test Only design. De Vos, et al. (2011: 147), describe the One Group Pre-test Post-test as a design where:

"Within one group there is a measurement of a dependent variable when no independent variable is present. Then subsequently an independent variable is introduced, followed by a repeated measurement of the dependent variable at a later stage. Measures of the dependent variables are then compared for two different states of the independent variable within the same group".

The Pre-test Post-test Only design can then be described as one which evaluates a certain aspect based on a particular incident through a pre-test and evaluates the

same incident through a post test at a later stage (Williams 2007: 3). When used separately, these designs face multiple threats to validity and reliability. The One Group Pre-test Post-test design would be threatened by factors such as maturation and history amongst others while the Pre-test Post-test Only design would be threatened by the absence of both an experimental and comparison group. A further challenge could be that any changes detected, could be as a result of the unreliability of the measurement device used (Bonate, 2000: 2; Gravetter & Forzano, 2009: 283). Therefore, in an effort to minimize the possibility of such occurring in this study, the classical quasi pre-test post-test design was adopted. Additionally, the researcher took the necessary precautions in addressing issues related to validity and reliability, which are discussed later in this chapter in order to decrease the possibility of the measurement device yielding unreliable results.

In the classical quasi-experimental pre-test post-test, design the experimental group (see Figure 3.1) **A1** represents the observation of the dependent variable before the intervention, which is done through a pre-test. The variables in this project, as defined by Du plooy- Cillers, et al. (2014: 87) include factors that have the ability to change states, values, behaviours or actions. Variables are not constant and may change in form depending on the phenomena being studied. In this study, the dependent variable refers to the community's level of awareness on diabetes, which was measured through a pre-test that was administered by the researcher through structured questionnaires. Independent variables on the other hand are the main drivers for establishing cause and effect relationships, if a researcher manipulates or administers an independent variable it enables them to detect the effect it will have on the dependent variable. In this case, independent variables refer to the interventions that

were administered using traditional folk media to convey key diabetes messages to respondents.

The **X** is a representation of the interventions as noted above. Logically the dependent variable would be affected by the independent variable causing some sort of change, which can then be measured at **A2**, through a post- test. The researcher should then be able to observe a difference between the data collected in the pre-test before the intervention **(A1)** and the data collected in the post-test **(A2)** after administering the intervention in the form of traditional folk media performances **(X).** Consequently, researchers should be able to draw conclusions on the nature of the relationship between the dependent and independent variables if it exists (Cillers et al 2014: 87; Welman et al 2005: 16; Bernard 2013: 28; Cowran 2008: 195; Taylor, Kermode & Roberts 2006: 183).

In the control group, the intervention represented by **X** is absent (see figure 3.1) meaning that respondents will not be exposed to an intervention in the form of traditional folk media performances and the data from this group will be used as a benchmark for comparison (Levy & Ellis 2011: 156). White and Sabarwal (2014: 1) emphasise that essentially the purpose of the control group is to pick up phenomenon, which would not have occurred in the absence of an intervention. For example, in this study, the data in the control group will give an indication of the current knowledge and awareness level that the community has on diabetes. Here the dependent variable **B1** that again is the community's awareness levels of diabetes is measured through a pre-test using structured questionnaires and a repeated measure of the dependent variable **B2** is taken at a later stage through a post-test.

In summary, the data from **A1** and **B1** are considered the baseline measurement of the dependent variable and are conducted prior to any manipulation or inducement of

an intervention or treatment. This refers to measurement of the community's awareness levels through a pre-test before an intervention takes place which are used as the standard measurement of awareness levels of diabetes in the community The intervention, represented by **X** is then dispensed into the experimental group, which is followed by the measurement of **A2** and **B2** through a post-test**.** In the experimental group, the six key diabetes messages are then conveyed to respondents through traditional folk media performances, followed by a post-test. In the control group, the post -test **A2 and B2** are compared in order to detect if there are any differences in scores and if those differences were as a result of **X** that took place in the experimental group and was absent in the comparison group (Salazar, et al 2015:137, Levy & Ellis 2011:156).

Figure 3.2 below is a graphical representation of the adapted version of the classical quasi -experimental design applied in this study:

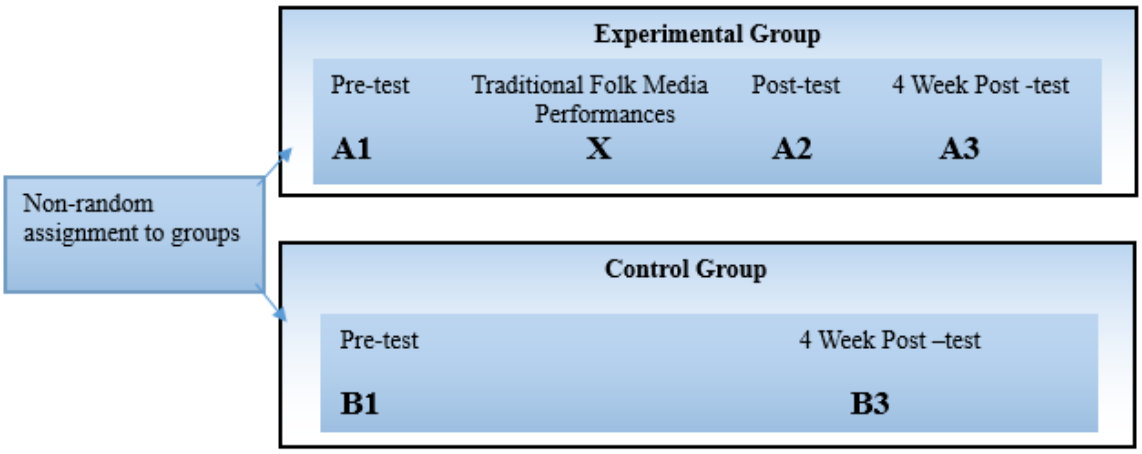

Figure 3.2: Diagram representing the adapted version of the classic quasi-experimental design

The communities' awareness levels on diabetes represented by **A1** and **B1** would be the dependent variable that is measured before the implementation of the intervention.

Traditional folk media like song and dance poetry and storytelling would then be elements of the independent variable used to convey six key diabetes messages through interventions and is represented by the (**X**). Following that, the awareness levels of diabetes represented by (**A2)** in the experimental group would again be measured in order to establish if there is a difference in the pre and post-test scores. In the control group, because of the absence of an intervention, a post-test was not conducted, as it would be a mere repetition of the pre-test in a short period therefore no data was collected at **B2**. After a period of four weeks the community's' level of awareness on diabetes was then again measured at (**A3 and B3)** through a repeat post-test termed the 4-week post-test.

The **X** represented in figures 3.1 and 3.2 is a crucial element of this research design and is discussed in more detail below.

3.3 Interventions

An intervention can be described as action taken by one party with the aim of improving the well-being of other people, these can take different forms for example it could be presented as a medical experiment, treatments or educational campaigns that spread health messages to people (Richards & Hallberg 2015: 2; Minnesota Department of Health 2001:1; De Vos et al 2011:475). In agreement, Beaulieu (2012: 45) describes interventions as creative but realistic steps taken by researchers to remedy problems. Interventions are used across different disciplines but are most commonly used in clinical research studies by social workers, health care practitioners and development communication specialists. Interventions are mainly used to promote health respondents in order to motivate them to make better life choices relating to their health (Anderson et al. 2004: online).

For this enquiry, interventions in the form of traditional folk media performances like; song and dance, poetry and storytelling were used to study if using this medium would be effective in promoting knowledge and awareness of diabetes in communities. Based on Nags' (2013: 12-13) explanation on the forms of traditional folk media, in this study oral tradition and performing arts namely: song and dance, poetry and storytelling were used. Sharmas' (2015: 61) characteristics were applied as guidelines during the process of designing the content and delivery of the folk media interventions. The six key messages noted previously (see table 3.1) emerged as important ideas to be considered from studies conducted in cycle 1 of the overall research project where a health dialogue model for patients living with diabetes in the Free State province was developed (Reid et al 2018: 125). The six messages were paired, forming three groups of messages that were conveyed through traditional folk media like song and dance, poetry and storytelling (see table 3.1). Each group of messages was presented using a combination of traditional folk media and all six messages were presented to respondents on the same day.

The interventions were packaged as follows:

Table 3.1: Presentation of intervention packaging[3]

Traditional Folk Media Performance	**Key Messages Represented**
Storytelling	1. Diabetics can live a normal life **(Diabetic people should avoid social gatherings)** 2. Diabetes can be controlled and complications managed **(Not all diabetic people go blind or lose a leg or arm)**
Poetry	1. Take fast walks for at least 30 minutes on most days **(Diabetic people do not have to exercise regularly)** 2. Lose weight as prescribed **(Diabetic people do not have to worry about losing weight)**
Song and Dance	1. Medication must be taken as prescribed **(Diabetic people should take diabetes medication even when they don't feel sick)** 2. Eat small regular meals **(Diabetic people should eat one big meal a day)**

[3] Please see addendum 8, 9 and 10 for interventions

Hill & Cochrane (2011: online) mention that without the communication component, interventions will cease to exist. To achieve desired results, researchers should consider certain principles during the design and construction phases of their interventions.

Firstly, interventions need *to serve a purpose*: the reason behind the intervention should be clear, unambiguous and should communicate a message. For example, the purpose of the interventions in this study was to convey six key diabetes messages to members of a community in order to raise awareness on diabetes in that community.

Secondly, interventions should be *planned and formalised*: Researchers need to clearly plan how they are going to present interventions to respondents the "who, what, when and why" should be clarified in advance. The contents, delivery mode, visuals and all other relevant aspects need to be made official in the planning phase. For example, in this study interventions were presented to respondents in Sesotho, in the waiting area by the researcher and a trained fieldworker. Traditional folk media performances were chosen because literature suggests it is a very suitable medium for audiences with low literacy levels. Moreover, the use of traditional folk media made it possible to compose the content of the interventions in a manner that would enhance community member's engagement due to ease in relatability to the storyline, characters and the order to trigger an emotional connection. Thirdly, interventions need to be *repeatable, timed, modifiable, adaptable, and combined.* The researcher needs to be able to communicate the same message to different respondents or the same respondents in the same fashion. The intervention needs to be sequential and timed. A pattern should be followed to enhance rigor and the communication should be kept to the point. A researcher needs to be able to make changes to an intervention

to accommodate respondents therefore, it is important that the intervention is modifiable. The interventions will be conveyed in the form of performances, which make it possible to adjust certain features to accommodate respondents but still preserve the principle message.

Lastly, interventions need to be used in combination: interventions should be designed in such a way that more than one message can be communicated to respondents. The interventions in this study were designed in the form of song and dance, poetry and storytelling, with each intervention conveying two messages, as noted previously. Furthermore, the form in which the interventions are packaged enabled the researcher to repeat them to various audiences. The interventions were also designed that each of them last for no longer than five minutes in order to keep the communication precise and ensure that respondents grasp the message being communicated. The interventions were created in English and translated into Sesotho, by an independent Sesotho speaking transcriber. The Sesotho translations were also reviewed for cultural sensitivity and verification that the translations were translated into the colloquial speech used by the people of Botshabelo and Thaba ‘Nchu. This would further assist the interventions in breaking through cultural boundaries since respondents were primarily Sesotho speaking.

The section to follow will provide details on the research technique pertaining to the study.

3.4 Research Technique

In order to realise the aforementioned objectives as indicated in chapter 1 (please see table 1.1) the researcher used structured interviews by means of questionnaires as a methodology. Stephanidis (2005: 275) define structured interviews by means of

questionnaires as a systematic approach to collecting data in a consistent manner across a number of respondents by a trained researcher that follows the “interview schedule as if it were a script”. In agreement Ebrahim and Bowling (2005: 204); Ary, Jacobs, Sorensen, and Walker (2013: 466) state that structured questionnaires make use of rigid questions that are presented to all respondents in a consistent manner meaning there are no alterations in wording.

In this study, the six diabetes messages were composed in English, but were first translated into Sesotho by an independent Sesotho speaking translator. The messages translated into Sesotho were checked for cultural appropriateness and it was also ensured that translations were conducted in the colloquial language used by respondents. The six diabetes messages in the questionnaires presented to respondents were straightforward and only required respondents to provide closed-ended responses and these messages were presented to all the respondents of the study in the exact same order. The questionnaires were drawn up with pre-coded responses on it (please see addendum 7) which enabled the data collection phase to progress quickly and systematically.

Using structured interviews by means of questionnaires as a research technique serves as an advantage to researchers because of its unambiguous nature and the techniques ability to enable researchers to use large samples while ensuring that data is collected in a systematic rigorous manner (Beri & Govind 2013:126; Sharma 2015: 20). Employing this data collection technique reduces the likelihood of respondents misreading or misinterpreting questionnaires especially since researchers’ presents the information in the questionnaires to respondents, themselves.

Additional advances to this technique include its ability to afford researchers the opportunity to collect data from respondents with low literacy levels or reading

difficulties (Diem & Moyer 2005:109). For example, respondents were required to indicate their response by means of referring to a coloured ball that was placed in front of them, therefore literacy levels were not an obstacle. Furthermore, when using structured interviews by means of questionnaires, the researcher poses questions to respondents and fills in the responses, which promotes higher response rates as opposed to self-administered questionnaires (Diem & Moyer 2005:109).

Due to the closed-ended questions, researchers may miss complex trends that can only be discovered through allowing respondents to express themselves freely (Kajornboon, 2005: online). In this case, the purpose of the study was to focus on the predetermined six key diabetes messages, therefore further exploration was not required. This can however be a focus of a further study.

3.5 Population and Sampling

The population of this study consisted of 26 public health care services in Botshabelo and Thaba ‘Nchu. Determining the exact population of adult patients that attend public health care services in the two communities was a difficult task because the researcher was unable to get access to the numbers from the relevant sources. Therefore, the exact population was not known and all the adult respondents attending these public health care services were treated as the population. Both Botshabelo and Thaba ‘Nchu are considered low-middle income communities. Moreover, studies conducted in cycle 1 of the overarching research project identified that the majority of patients attending public health care services in the sub districts of Botshabelo and Thaba ‘Nchu were Sesotho speaking. Additionally, amongst these patients, only a small percentage had completed formal schooling and others were found to be illiterate (Reid et al 2018: 125). This means the respondents in both Botshabelo and

Thaba ‘Nchu have a number of characteristics in common, which keeps in line with the chosen methodology.

The study made use of two sample sets. Firstly, the random sampling of public health care services (N=26) was done in order to sample six of the 26 public health care services, three from Thaba ‘Nchu and three from Botshabelo. A further random sample from the six sampled public health care services was conducted to sample, one public health care service in Botshabelo and Thaba ‘Nchu respectively as a control site.

Secondly, convenience sampling was used to sample respondents at each of the sampled public health care services. This sampling technique was used because the study aims at raising the awareness levels of diabetes amongst adult patients at a community level and therefore does not intend on generalising the results into larger populations.

It was anticipated that 50 respondents would be sampled at each public health care service in order to secure 300 respondents as a sample size for the first data collection phase. The researcher considered 300 respondents as a feasible sample size because a larger sample would make it difficult for the researcher to manage the data collection phase with only two people available for manpower.

Respondents in both the experimental and control groups were required to meet the inclusion criteria noted below:

- respondents had to be 18 years or older and visiting the respective public health care services on the day of data collection;
- respondents had to be Sesotho speaking and regular patients at the respective public health care services, meaning they visit the public health care service on a monthly basis;

- respondents had to submit signed informed consent forms; and
- for the experimental group, data was collected during the pre, post and 4 week-post-test. The criteria remained the same respectively, with the exception that respondents who had been exposed to any diabetes related information between the post and 4-week post-test data collection phases would be excluded from the study.

This is because the objective of the 4-week post-test was to establish if the interventions would be able to raise long-term awareness. Exposure to other forms of communication on diabetes could influence the data.

Table 3.2 Distribution of sampled respondents (n=296)

Control/Intervention group	**Number of sampled respondents**	
	Pre-test, intervention and post-test phase (n=296)	**4-Week post-test phase (n=183)**
Control	93	63
Experimental	203	120

Table 3.2 is an indication of the sampled respondents at each of the public health care services during the pre, intervention and post-test phases (n=296) and at the 4-week-

post-test phase (n=186). Although it was envisioned that the study would consist of 300 respondent's factors outside of the researcher's control, for example the variation in size between the different public health care services and patient's willingness to participate in the study led to a sample size of 296 after the pre\intervention and post-test phase.

For the 4-week post-test phase, 111 respondents did not return for the assessment at their respective public health care services. An additional two respondents' questionnaires had missing responses on them because respondents' responses to a message were "I don't know". Since the questionnaire did not accommodate such a response, the field was left blank resulting in incomplete data. Only 183 respondent's questionnaires were fully completed and used for data analysis, which is discussed in chapter 4.

Before the research design was applied to the study, a pilot study was conducted in order to test the design, minimise errors and enhance rigor. A more detailed discussion regarding the logistics of the pilot study as well as the lessons learnt are discussed below.

3.6 Pilot Study

A pilot study can be described as the trial phase or the mini version of a full scale study that assist in designing a further confirmatory study (Calitz, 2009: 257–259; Arain, Campbell, Cooper & Lancaster 2010: 2). Pilot studies are conducted for improving data collection techniques, evaluating the appropriateness of standard measures as well as to detect and reduce methodological errors in a research design (Thabane, Ma, Chu, Cheng, Ismalia, Rios, Thabane, Giangregorio & Goldsmith 2010: 10).

In this study, the purpose of the pilot study was to establish the effectiveness of the chosen methodology, to assess how long each intervention would take as well as how practical it would be to execute the interventions in a primary health care setting. Moreover, the pilot study was used to assess if the messages in the interventions were understandable to respondents. The pilot study was conducted in Bloemfontein at the Gabriel Dichabe public health care service. This health care service was selected through purposive sampling, because it is very similar to and offers the same services as the public health care services that were sampled in Thaba 'Nchu and Botshabelo.

The pilot study consisted of 25 respondents who were conveniently selected at Gabriel Dichabe primary health care service, all of which met the requirements of the inclusion criteria aforementioned. Conducting the pilot study assisted the researcher in detecting a number of aspects that could improve data collection. Firstly, during the pre-test phase, the researcher initially planned to hold the blue and the red balls for respondents to touch when indicating their agreement or disagreement to the messages being posed to them. In practice this posed a challenge because, the questionnaires had to be completed by the researcher, making it difficult for the researcher to record responses and hold the balls at the same time. To modify this, the researcher placed the balls on the table or any available surface and respondents did not necessarily have to touch the balls but rather indicate using arm gestures, the colour they would like to use as a response. The researcher also reminded respondents of what each coloured ball represented after presenting a message to them.

Secondly, during the pre and post-test several respondents through their non-verbal communication, indicated that they were experiencing difficulties with understanding what the term "social gatherings" referred in the first message presented to them. To

account for this, the researcher in order to give a concrete idea of the concept and enhance understanding provided examples of social gatherings.

Thirdly, during the intervention phase the researcher observed that the presentation of all six diabetes messages consecutively overwhelmed respondents. This raised the concern that respondents would possibly not grasp the core messages being communicated to them. To remedy this, after each traditional folk media performance, the core message was reinforced by briefly highlighting the underlying narrative in each performance. Lastly, the pilot study afforded the researcher an opportunity to evaluate the approximate time it would take to collect data at each public health care service, which enabled the researcher to set an attainable data collection period for the study.

Upon completion, the data collected was coded using numeric values onto a spreadsheet before being sent to the biostatistician. This allowed for further scrutinising of the process to ensure the smooth capturing of data for the main study. However, the data collected from the pilot study was not included in the main study as it was only done to establish the practicality of the chosen methodology and was not collected from the sampled public health care services.

The researcher then proceeded to the data collection phase of the main study, which is discussed below.

3.7 Data Collection

To provide a holistic conceptual understanding of the data collection process, the researcher will discuss this section under four sub-headings namely: pre-test, post-test, interventions and 4-week post-test.

3.7.1 Pre-test phase

The purpose of the pre-test was to measure the current awareness levels of diabetes amongst respondents in order to establish a baseline measure as noted previously.

At the experimental sites, using structured interviews by means of questionnaires the researcher posed six messages to respondents (please see addendum 7). The messages were presented to each respondent on a one on one basis in a private space in the public health care service in order to avoid respondents influencing each other's responses. Messages were posed in Sesotho, and respondents were required to use a blue or red ball to show their agreement or disagreement to the messages being posed to them by the researcher.

The red ball symbolised a respondent's agreement and the blue ball symbolised their disagreement. Respondent's responses were recorded on the questionnaire, which consisted of predetermined responses by means of indicating the name of the public health care service, the respondent number and relevant tick boxes for agreement or disagreement. This enabled the researcher to complete the pre-test phase promptly. On completion of the pre-test, a marker, which indicated the respondents number, was placed on their clinic cards so that the researcher would be able to identify them during the post-test phase. Respondents were then asked to return to the waiting area where they would be exposed to interventions.

At the control sites a similar procedure was followed, the only difference being that upon completion of the pre-test phase, respondents were not exposed to any interventions.

3.7.2 Intervention phase

Interventions can be described as the heart of the quasi-experimental pre-test post-test design (Hill & Cochrane 2011: online). Although the researcher did not collect any data through the interventions, it is necessary to mention interventions in this section in order to provide a holistic understanding of how they fit into the whole design. The researcher used interventions in the form of traditional folk media performances by means of song and dance, poetry and storytelling (see addendum 8, 9 and 10) in conjunction with structured interviews by means of questionnaires.

The data presented in table 3.1 was conveyed to respondents with each intervention proceeding for no longer than five minutes (see table 3.1). Interventions were conveyed in respondent's mother tongue. Once all six key messages had been conveyed, respondents were requested to remain seated and wait for the post-test phase to commence.

3.7.3 Post and 4-week post-test phases

The post-test followed a similar pattern to the pre-test and was only applicable to respondents in the experimental groups. As noted previously, data was not collected from the control groups during the post-test phase, therefore respondents in the control groups were excluded from this phase. The same messages were posed to respondents on a one on one basis in a private area in the public health care service and the same coloured balls were placed in front of respondents for them to indicate their agreement or disagreement. The researcher used the markers placed on respondent's clinic cards in order to verify their participation in the study. Furthermore, the same questionnaires corresponding to the number identified on the markers placed inside respondents' clinic cards were used to record respondent responses.

On average, after visiting a public health care service patients are given a return date for a month later and the patients follow up appointment date is stamped onto their clinic cards. The researcher used this as a guide for scheduling when it would be most appropriate to return to each public health care service for the 4-week post-test assessment.

Respondents from both the control and experimental groups participated in the 4-week post–test phase. The same procedure as in the post–test phase was followed during the 4-week-post-test phase. However, respondents were first asked if they had been exposed to any other diabetes related messages since their participation in the study. The purpose of the 4-week post-test is to establish whether the interventions would be able to raise long-term awareness amongst community members by comparing the results of the 4-week post-test in the control group to the results in the experimental group. Therefore, respondents that were exposed to any other diabetes related messages were excluded from participating as per the inclusion\exclusion criteria noted previously. However, none of the respondents indicated exposure to other diabetes related messages. The pre and post-test data collection phases were completed within a week and were followed by a repeat post test after a period of four weeks. This was then followed by the data analysis stage of the research process.

3.8 Data analysis

There are various data analysis methods available in quantitative research, in this study descriptive statistics was used which Welman et al. (2005: 231) describe as: “a summary of the data obtained for a group of individual units for analysis”. Descriptive statistics use statistical methods to summarise data that were collected in a study in a meaningful manner so that patterns may emerge in order to enable the researcher to

interpret the data (Bernard 2013: 393-398). Before sending the data to the biostatistician for assistance, the researcher captured the data from the questionnaires onto an excel spreadsheet.

Double data entry was done and co-checked by another co-researcher to verify that the data was captured correctly. This study used frequencies and percentages for categorical data and medians, and medians and percentiles for continuous data, were calculated per group. The change from pre- to post-test was calculated and compared by means of the Kruskal-Wallis test for two independent numerical variables. Categorical variables were compared by means of a Chi Square test and Fisher's exact test where appropriate. The change within groups was calculated and compared by means of McNemar's test.

Furthermore, the Department of Biostatistics, School of Medicine, and Faculty of Health Sciences at the University of the Free State conducted the analysis of data. More details are provided in chapter four.

The next section of this chapter addresses the steps taken by the researcher in ensuring that ethical conduct was upheld during the various stages of the research process.

3.9 Ethical considerations

Louw (2014: online) defined ethics as follow: "Ethics is the cornerstone of research and without it the delicate and complex interweave of research falls apart in undesirable ways".

The Singapore Statement mentions four guiding principles that researchers should pertain to when conducting their research namely honesty, accountability, good stewardship and professional courtesy. The statement also identifies professional

responsibilities that are fundamental to the integrity of research (Resnik & Shamoo, 2011: 71–75). The researcher used these principles and professional responsibilities as the basis of their conduct. The professional responsibilities were applied to the study as follows:

- ***Professional responsibilities towards integrity and research methods*:**

Researchers need to take responsibility for the trustworthiness of their research and that appropriate research methods should be employed during the research process; in this study, the research design employed required the researcher to interact with respondents through structured interviews by means of questionnaires. The researcher ensured that they were being consistent during all interactions in order to collect objective quantifiable data. Secondly, the researcher spent a considerable amount of time and referred to relevant literature in developing the interventions and methodological instruments that were used in the study. Furthermore, a pilot study was conducted to test these methods, in order to ensure that they are of a standardised quality.

- ***Professional responsibility towards research records*:**

Clear accurate records of all research should be kept for verification and reapplication purposes; this study used meticulous sampling procedures for the public health care services to limit bias and enhance rigor. The researcher also made efforts to enhance validity and reliability in the research design as well as ensure rigor and consistency during the data collection process. The data captured was prepared and saved on spreadsheets before being sent to the biostatistician for analysis, while the researcher keeps the raw data safely.

- ***Professional responsibilities towards adherence to regulations, and***

***conflict of interest*:**

Researchers should adhere to all regulations and disclose any conflicting issues that could jeopardise the trustworthiness of their study; the researcher followed strict guidelines in ensuring ethical conduct with the respondents in the study. The guidelines included that respondents should be:

- given information leaflets and required to sign consent forms before participating in the study;
- informed that they could at any point withdraw from the study and would not suffer any consequences;
- told that no information would be withheld from them and notified that there would be no financial benefits from participating in the study;
- informed that they need not reveal their identities therefore confidentiality and anonymity was guaranteed and;
- notified that their responses would not influenced by the researcher, nor would the data manipulated.

Additionally, as noted in chapter one, this study forms part of a larger multi-phase project which has been granted overall ethical approval by the Health Research Ethics Committee of the University of the Free State (HSREC 113/2016). Permission was also received from the Department of Health Free State Province for data collection to take place in their public health care services and ethical clearance for this particular study was obtained on December 4th, 2017 (UFS-HSD2017/1395), please see addendum 1 and 2.

In order to scientifically argue whether the research techniques used for executing the research design were appropriately constructed and evaluated, the concepts of validity

and reliability assessed (Putka & Scakett 2010: online). Issues pertaining to the validity and reliability of this study are addressed below.

3.10 Issues of Validity

Validity in quantitative research refers to the degree to which the measurement instrument measures what it is set out to measure and how accurate the results are (Golatshani 2003: 598-599; Du Plooy-Cilliers et al., 2014: 256; Bryman & Cramer 1995: 72). The validity of a study can be assessed in several forms, as aforementioned the study made use of structured interviews by means of questionnaires as a data collection technique (measurement instrument) - validity in this context, speaks to the number of built-in errors in the questionnaire (Bolarinwa 2016: online).

To address this, the researcher considered face, internal and external validity: Face validity speaks to how well a research design looks the way it should look and how accurately the theoretical concepts pertaining to the study are represented in the contents of the measurement instrument (Bernard 2013: 48; Bolarinwa 2016: online). The structured questionnaire was assessed by both the lead and co-research supervisors of the study who confirmed that at face value the research instrument was appropriate and that constructs of interest were evident in the wording of the messages in the questionnaire. Furthermore, the researcher compared the design of their questionnaire to that of similar studies, which have already been published.

Internal validity then refers to the confidence researchers have, in how well the results obtained from the study truly and accurately reflect what the measurement instrument was designed to measure (Bolarinwa 2016: online; Babbie & Rubin 2009: 157). The platform from which this study emerged was based on the findings from research conducted by other scholars during cycle 1 of the health dialogue model where as

noted previously, important messages that required further investigation emerged. The messages posed during the pre, post and 4-week post-test, and the messages conveyed to respondents through the traditional folk media performances were based on the knowledge leant in the first cycle of the health dialogue model. This means that the researcher had a good foundation from which to build the contents of the questionnaire in such a way that the responses from respondents would generate desired results thus enhancing internal validity.

External validity on the other hand, speaks to how well the results obtained from a study sample describe the broader population from which the sample was drawn (Babbie & Rubin 2009: 157; Lobiondo-Wood & Haber 2014: 290-294; Bolarinwa 2016: online). The sample size used in the study was not large enough to provide a mirror representation of the entire population and since respondents were conveniently selected, it would be difficult to generalize the findings to the larger population. However, selection bias was reduced through using random sampling for the public health care services thus, enhancing external validity. Furthermore, the classical quasi-experimental design enabled the researcher to have a control group even though respondents were not randomly assigned to groups (Salazar et al. 2015: 137), which increased the rigor and validity of the study.

3.11 Issues of Reliability

Reliability refers to the possibility of the results of one study reoccurring in another study that was conducted by another researcher at a different time using the exact same methods, which were applied in the first study (Du Plooy-Cilliers et al 2014: 254). If the same results were to occur, then the study can be deemed reliable.

The rigid nature of structured interviews by means of questionnaires increases the reliability of this methodology (Stephanidis 2005: 27; Diem & Moyer 2005:109). All the respondents in this study went through the same pre, post and 4-week post-test which ensured a consistent and systematic process of data collection, which makes it possible for the process to be, repeated thus enhancing reliability. Additionally, all the respondents in the experimental groups were exposed to the same messages during the interventions performed by the researcher and a trained field worker, which in itself enhanced rigor through consistency. Moreover, the researcher adopted the principles pertaining to interventions as described by Hill & Cochrane (2011: online) as a guideline for evaluating the quality and relevance of the interventions; one of which were that interventions must be repeatable overtime. An independent Sesotho speaking transcriber translated the interventions from English to Sesotho and verified cultural sensitivity, which increased rigor thus enhancing reliability. Furthermore, a pilot study was conducted to assist the researcher with identifying possible improvements that could be implemented in the research design, which in turn enhanced the validity and reliability of the study.

3.12 Summary

This study provided details on the research methodology, research design and other methodological aspects related to this study such as the population and sampling procedures, pilot study, data collection process and data analysis procedures. In conclusion, the chapter-conferred issues related to validity and reliability and discussed the ethical considerations and principles and professional responsibilities pertaining to the study. In chapter four, data analysis will be presented, followed by

the discussion and interpretation of results in chapter five ahead of the concluding chapter.

CHAPTER 4

DATA ANALYSIS

4.1 Introduction

Upon completion of the data collection process, descriptive statistics were used to analyse the data by means of using the Kruskal-Wallis, Chi-Square, Fishers Exact and McNemar test where applicable. The Kruskal-Wallis test is a method for testing whether samples originate from the same distribution and is used to compare two or more independent samples of equal or different sizes (McDonald 2009: online). The Chi-Square test on the other hand is used to assess whether associations between categorical variables exist, regardless of whether the variables are related or not (Howell 2011: 3; Satorra & Bentler 2010: 2). The test only provides associations between categorical variables and cannot give any inferences (ibid).

On the other hand, the Fishers Exact test is used when two nominal variables are present and one seeks to identify whether the proportions of the one variable are different, depending on the value of the other variable. This test is mostly used when the sample size is rather small (ibid). Lastly, the McNemar test can be described as a method for assessing the significance of differences on two correlated proportions. This test is when researchers want to find out if any changes in proportion for the paired data exists (Stephanie 2015: online).

In this chapter, the demographic data of respondents will be presented, followed by an analysis of control and experimental group respondents responses to key diabetes messages and traditional folk media interventions, respectively. Subsequently the chapter will provide a presentation of the P-values observed and conclude with a short

summary of respondents responses to the messages conveyed to them through traditional folk media interventions.

4.2 Demographic Data of Respondents

The demographic information obtained from respondents in this study only consisted of their age and gender and is presented in figure 4.1 and table 4.1 below.

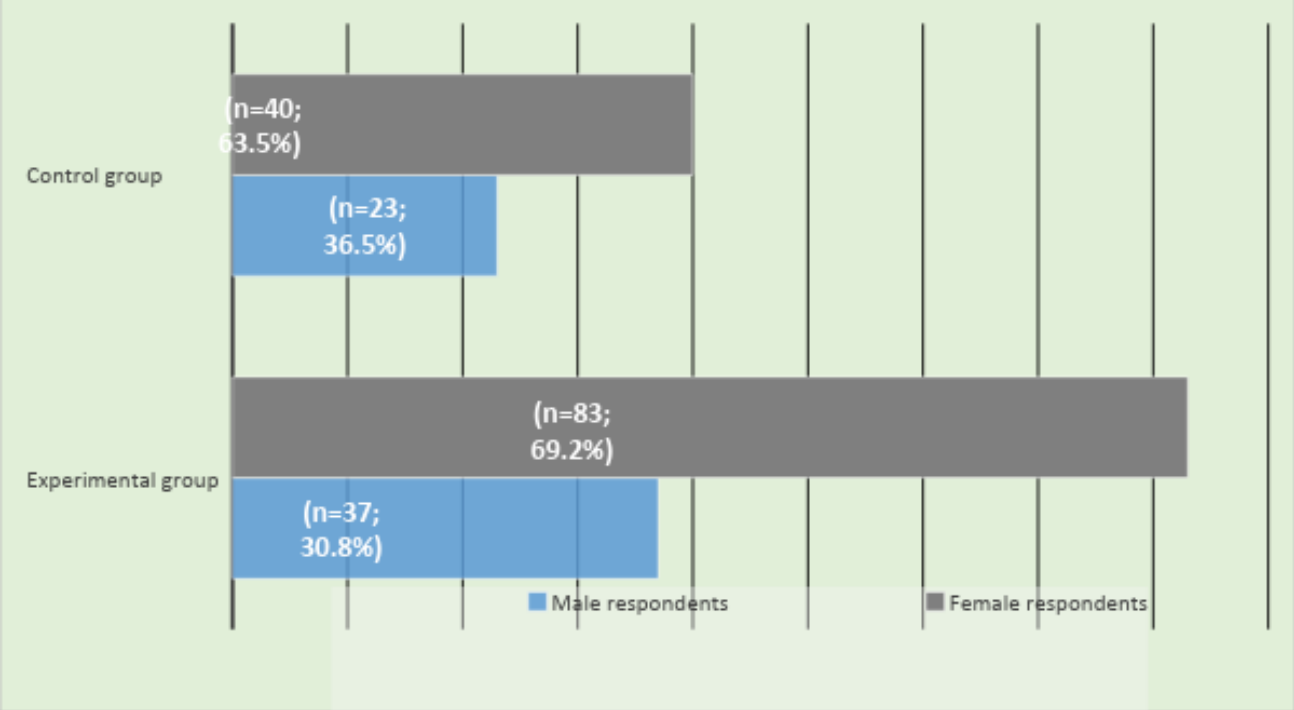

Figure 4.1: Frequency and percentage of male and female respondents in control/experimental groups

Figure 4.1 represents the frequency and percentages of males and females in both the control and experimental groups. From the data, it is evident that the study consisted of more female respondents in both the control group (63.5%) and experimental group (69.2%) than men (36.5%; 30.8%). Although there were more females than males present in the study, the gender distribution in both groups (experimental and control) is fairly similar, keeping in line with the requirements of the applied research design.

Control/Intervention Group	Range (Min-Max)	Lower Quartile	Median	Upper Quartile
Control group	18-84	35	48	61
Experimental group	21-88	38.5	52	64

Table 4.1: Age distribution of respondents in both control and experimental groups

Table 4.1 is a presentation of the age distribution of respondents in both the control and experimental groups. In the control group, the median age is 48 and 52 in the experimental group. This indicates that the ages of respondents in both the control and experimental groups respectively, compared favourably.

4.3 Respondents Responses to Key Diabetes Messages

Respondents were requested to respond to six key diabetes messages (see table 4.2). The data below is presented according to the frequency and percentage of correct and incorrect responses provided by respondents in relation to each message as per control and experimental groups.

Table 4.2: Respondents responses to key diabetes messages in control and experimental groups

Control group: n=63					**Experimental group: n=120**					
Key diabetes message (intervention used)	**Pre-test phase Frequency (%)**		**4-week post-test phase Frequency (%)**		**Pre-test phase Frequency (%)**		**Post-test phase Frequency (%)**		**4-week post-test phase Frequency (%)**	
	Correct response	**Incorrect response**	**Correct response**	**Incorrect response**	**Correct response**	**Incorrect response**	**Correct response**	**Incorrect response**	**Correct response**	**Incorrect response**
1. Diabetic people should avoid social gatherings (Story)	49 (77.8%) False	14 (22.2%) True	51 (81.0%) False	12 (19.0% True)	67 (55.9%) False	53 (44.1%) True	112 (93.3%) False	8 (6.7%) True	107 (89.2%) False	13 (10.8%) True
2. Not all diabetic people go blind or lose a leg or arm (Story)	46 (73.0%) True	17 (27.0%) False	51 (81.0%) True	12 (19.0%) False	90 (75.0%) True	30 (25.0%) False	114 (95.0%) True	6 (5.0%) False	110 (91.7%) True	10 (8.3%) False
3. Diabetic people do not have to exercise regularly (Poetry)	57 (90.4%) False	6 (9.6%) True	54 (86.0%) False	9 (14.0%) True	107 (89.2%) False	13 (10.8%) True	117 (97.5%) False	3 (2.5%) True	114 (95.0%) False	6 (5.0%) True

4. Diabetic people do not have to worry about losing weight (Poetry)	28 (44.4%) False	35 (55.6%) True	40 (63.5%) False	23 (36.5%) True	95 (79.2%) False	25 (20.8%) True	112 (93.3%) False	8 (6.7%) True	95 (79.2%) False	25 (20.8%) True
5. Diabetic people should take diabetes medication even when they don't feel sick (Song/ Dance)	60 (95.2%) True	3 (4.8%) False	53 (84.1%) True	10 (15.9%) False	114 (95.0%) True	6 (5.0%) False	118 (98.3%) True	2 (1.7%) False	113 (94.2%) True	7 (5.8%) False
6. Diabetic people should not eat one big meal a day (Song/Dance)	26 (41.3%) True	37 (58.7%) False	37 (58.7%) True	26 (41.3%) False	85 (70.8%) True	35 (29.2%) False	112 (93.3%) True	8 (6.7%) False	94 (78.3%) True	26 (21.7%) False

- ***Control group***

In table, 4.2 control group respondents' responses indicated that the percentages of correct responses of four messages improved after the 4-week post-test phase, whilst the percentages of another two messages deceased after 4 weeks. Correct responses to message one indicated an increase of 3%; message two 8%; message four 19% and message six 17%, respectively. However, a decrease in correct responses was observed with an indication of a 5% decrease in correct responses for message three and 11% for message five, respectively.

It is unclear to the researcher what the reasons for the observed increase and decrease in scores could be. However, it is noted that respondents in the control group were not asked at the 4-week post-test, whether they had been exposed to other diabetes related messages. This could suggest that exposure to other diabetes related messages could have improved respondents reasoning resulting in an increase in the percentage of correct responses at the 4-week-post-test. Equally, possible exposure to other diabetes related messages could have possibly confused respondents, or perhaps respondents were not interested in diabetes therefore resulting in a decrease in the percentage of correct responses, at the 4-week-post-test, this requires further investigation.

- ***Experimental group***

In the experimental group, respondent's correct responses increased for most (n=4) messages from the pre-test to the 4 week-post-test phase, as one could have expected. With the exception of message four and five, all percentages of correct responses increased from the responses provided at the pre-test phase to the percentages of correct responses provided at the 4-week post-test phase. Although

an increase in the percentage of correct responses from the pre-test to the post-test phase was observed in message four, no differences were found in the percentage of correct responses between the pre-test and 4-week post-test phases. Message five indicated similar results, with a minute decrease in correct responses from the pre-test to the 4-week post-test phases.

Respondents responses to the majority of (n=4) messages indicate that messages were retained by respondents from the pre-test to the 4-week post-test phase, with the responses of two messages staying the same after a period of four weeks. The reasons for the observed findings are unclear, further investigation is required.

4.4 Responses to Traditional Folk Media Interventions

In this section an analysis of the respective traditional folk media interventions that were used to convey messages to respondents in the experimental group is provided. Table 4.2 also indicates which traditional folk media intervention was used, per key diabetes message. Traditional folk media interventions were packaged as follows: messages one and two were conveyed to respondents through storytelling, three and four through poetry and messages five and six through song and dance

- ***Storytelling***

Messages one and two were conveyed through storytelling. An increase in correct responses occurred in message one (33%) and message two (17%) from the pre-test to the 4-week post-test phases. Seemingly, storytelling folk media intervention was successful in conveying key diabetes messages, since key diabetes messages were well retained.

- ***Poetry***

Message three and four were conveyed through poetry. An increase of 6% in correct responses was observed in message three, from the pre-test to the 4-week post-test phases. Conversely, no changes in respondent's responses was observed in message four, from the pre-test to the 4-week post-test phases. Respondents responses suggest poetry as traditional folk media intervention has the potential to convey key diabetes messages successfully, since one of the two messages using this intervention were retained by respondents in the study.

- ***Song and Dance***

Messages five and six were conveyed to respondents through song and dance. A decrease of 0.8% in correct responses occurred in message five, whilst an increase of 7% in correct responses was observed in message six. Similarly, to the poetry intervention, respondent's responses indicate that interventions using song and dance have the potential to convey key diabetes messages successfully. This is indicated by respondent's retention of message six.

4.5 Changes in Respondents Responses from the Pre to 4-Week Post-Test Phases

Table 4.3 depicts P-values within the control and experimental groups according to each of the six key diabetes messages. The table further illustrates the P-value of each message across the control and experimental groups. This enables identifying possible statistical significant changes between messages conveyed in the pre and 4-week post-test phases. The P-values are presented in this manner, due to the control and experimental groups' pre-test responses not being homogenous (see Table 4.2)

Table 4.3: P-values within and across groups depicting changes between messages conveyed in pre and 4-week-post-test phases [4]

Key diabetes message (intervention used)	Changes from pre to 4 week-post-test phases		
	Statistical test used		
	McNemar		Fishers exact/Chi-square
	P-values within control group	P-values within experimental group	P-values across control and experimental groups
1. Diabetic people should avoid social gatherings (Story)	0.64	<0.01*	<0.01*
2. Not all diabetic people go blind or lose a leg or arm (Story)	0.19	<0.02*	0.49
3. Diabetic people do not have to exercise regularly (Poetry)	0.43	0.05*	0.79
4. Diabetic people do not have to worry about losing weight (Poetry)	0.03*	1.0	<0.01*
5. Diabetic people should take diabetes medication even when they don't feel sick (Song \ dance)	0.04*	0.79	0.72
6. Diabetic people should not eat one big meal a day (Song\dance)	0.03*	0.16	0.16

[4]* values <0.05 indicate statistical significance

The P values of messages one to three within the control group were not statistically significant however, P values of messages four to six in this group were found to be statistically significant. Interestingly, in the experimental group messages one to three were of statistical significance and messages four to six not.

Due to the already mentioned non homogenous pre-test results in the control and experimental group, P-values across the control and experimental groups' pre and post-test phases were calculated. According to the P values depicted in Table 4.3, only message one, (presented using storytelling), and message four, (presented via poetry) presented statistically significant changes from the pre-test to 4-week post-test phases of this study.

4.6 Summary

This chapter reviewed the demographic data of respondents as well as respondent's responses towards key diabetes messages and traditional folk media interventions. In conclusion, the chapter provided an analysis of the P-values depicting changes in respondent's responses from the pre to 4-week post-test phases in both the control and experimental groups as well as P-values found across the two groups; statistical significance was indicated when present.

Chapter five, presents a discussion of the findings, which will be followed by recommendations and conclusions.

CHAPTER 5

DISCUSSION OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

This dissertation emerged from a health dialogue model that was developed for patients living with type 2 diabetes. In an effort to test the feasibility of this model, the purpose of this study was to use a phased approach to describe the use of traditional folk media when conveying diabetes messages at public health care services in the Free State. Previous chapters provided an overview of existing literature and explanations on how methodological procedures were approached. This was followed by the analysis and presentation of findings. The purpose of this chapter is to reflect on the main findings of the study in an effort to answer the research question: would the use of traditional folk media raise diabetes awareness amongst patients attending public health care services in a sub district in the Free State? The discussion commences with the demographic data of respondents, followed by a discussion on findings related to respondents' responses in relation to each key diabetes message and traditional folk media interventions used, respectively. The chapter will then offer possible recommendations for future studies highlight the value of the study and address the study limitations. In conclusion, the dissertation will come to an answer to the research question and possibly suggest areas for further investigation.

5.1.1 Respondents demographic information

According to the Statistics South Africa 2017 mid-year estimates, South Africa has a population of 55 908 900 people. The Free State province contributes towards 5.1% of the population, with 2 866 700 people living in the province (Stats SA 2017: online). This study consisted of 183 respondents from the communities of Botsabelo and Thaba 'Nchu with the control group consisting of 63 respondents and the experimental group 120, respectively. The gender distribution amongst male and female respondents was not equal; with more female respondents than male respondents however, no statistical differences were observed between the groups regarding gender (see figure 4.1 in chapter 4). Furthermore, in this study, the median age of respondents was close in both the control (48) and experimental (52) groups, no statistical differences were observed between groups regarding respondents age (see table 4.1 in chapter 4).

5.1.2 Theme 1: Respondent's responses to key diabetes messages

Diabetes knowledge as reflected by the control group's responses at the pre-test phase indicate a definite positive baseline awareness of key diabetes (n=4) messages. The percentage of correct responses to message *one* (social gatherings), *two* (diabetes complications), *three* (exercise) and *five* (taking medication) was over 70% at the baseline, whilst the percentages of correct responses to messages *four* (losing weight) and *six* (eat small meals) were lower at 44% and 41% respectively, see chapter four, table 4.2. This may indicate that people living in low-middle income environments may indeed be aware of diabetes strategies, contrary to what was presumed in literature (WHO:2015). However, the control group sample is not a representative sample of the community population therefore further research is required to investigate if similar baseline awareness levels are present within the larger

communities of Botshabelo and Thaba 'Nchu and in other areas of the Free State and in South Africa.

Surprisingly, the control group respondents' 4-week post-test results indicated that respondents' awareness of another four key diabetes messages showed further improvement, whilst the awareness of two messages had decreased (refer to chapter four, table 4.2). Messages *four* (losing weight) and *six* (eating big meals) reflected the highest levels of increased awareness at the 4-week post-test evaluations. Interestingly, these were the two messages that control group respondents had scored the lowest in at the baseline.

The observed changes in control group respondents responses to key diabetes messages at the 4-week post-test phase seem to indicate an unexpected heightened awareness of particular diabetes messages; yet this group of respondents did not receive any interventions from the researcher. Respondents in the control group were not asked whether they had been exposed to other diabetes related messages before taking the 4-week post-test as noted in chapter four and therefore, a possible explanation for the apparent awareness could be due to possible exposure to other diabetes related information from other sources. Such information, if tendered, could have swayed or wavered respondent's initial perceptions, thus resulting in the observed changes in awareness levels. However, since the researcher did not follow up on this viewpoint, further investigation regarding the matter may be necessary.

Furthermore, in this study, respondents responded to the six key diabetes messages on a one on one basis, away from other people. However, the researcher did not request respondents not to discuss their responses amongst each other. Since respondents spend quite some time waiting for their turn to be attended to by health care practitioners in the waiting areas of public health care services, informal

conversations regarding the diabetes messages embedded in the statements could have sparked amongst respondents during and/or after the pre-test phase. Dubberly and Pangaro (2009: online) mention that when people engage in effective conversations, the adjustments brought about through such conversations are educative and that such interactions may have long-term value to contributors and this could have been the case among control group respondents of this study.

A study conducted by various authors (Jordan, Lanham, Crabtree, Nutting, Miller, Stange and McDaniel 2009: online) found that unplanned informal conversations among respondents during health intervention efforts could influence intervention outcomes positively or negatively. The same authors argue that more often than not, when interventions in health care settings generate surprising or unexpected outcomes, minimal to no emphasis is placed on the highly influential role that the informal conversations between respondents have on the overall intervention outcome. Therefore, it seems as though this could possibly be another explanation to why changes amongst control group respondents' responses from the pre to the post-test phases were found in this study.

On the other hand, experimental group respondents' responses to message *one* regarding social gatherings were positive from the onset (pre-test phase) with over 50% of the respondent's, indicating that they did not think it was necessary for diabetic people to stay away from social gatherings. In spite of the positive response rate experimental group respondent's responses to message *one* improved significantly post interventions and remained strengthened after a period of four weeks. The improved responses suggest that respondents, who were not initially of the opinion that diabetics could attend social gatherings, seemingly absorbed the information relating to the first message, which was packaged within the storytelling intervention,

which was presented to respondents. The high correct response rate relating to message *one* in both the control and experimental groups seemingly suggests that the respondents of this study seem to consider that social gatherings do not pose a serious threat to their diabetes strategies.

This could further suggest that the social networks of respondents (friends, acquaintances, family) do not exclude people with diabetes from their social gatherings. A study conducted by the Health Experience Research Group (HERG) at the Oxford University investigating diabetics and their social life found that diabetes did not affect most of their respondent s social life. Respondents in their study indicated that they had learnt to manage their diabetes and the condition did not hinder their ability to visit friends' houses or attend social gatherings more especially because their social networks were supportive and accepting. Respondents reported to only having to worry about opting for alternatives that were as close as possible to their dietary guidelines (Healthtalk.org 2010: online). Although the above-mentioned study and the current study were conducted under vastly different contexts and landscapes, it seems as though the respondents of this study could possibly be leaning towards a similar trend, where people are aware of the fact that diabetics can have ordinary social lives as long as they are cautious about their dietary intake while out socialising.

However, the idea that diabetic people should not be part of social festivities still prevails amongst some of the respondents in both groups of the study, since neither the control nor experimental group had a 100% correct response rate at the 4-week post-test. This suggests that apart from the respondents of this study there could possibly be more people from the same communities where the study was conducted

who are misinformed informed about this message indicating a need for further awareness on the matter.

The experimental group respondents' responses to message *two*, touching on myths and misconceptions around diabetes complications demonstrated above 70% awareness about these aspects (see chapter 4 table 4.2). Comparative results were also obtained in the control group for this question. Respondent's responses to message *two* improved post intervention indicating an increase in awareness and similarly to message one, a high response rate in correct responses after four weeks was observed, indicating message retention and long term awareness amongst these respondents. It therefore appears that the respondents of this study seemingly dispelled the misconception that all diabetic people will inevitably experience loss of eyesight or undergo the amputation of limbs suggesting improved understanding of diabetes complications.

Other studies investigating the same concept in Kenya (Maina, et al 2010) and Namibia (Kambinda 2016) respectively, found that the study respondents had poor knowledge of diabetes complications. This further indicates that culturally sensitive health intervention efforts are an integral part of empowering communities in debunking health myths in order to pave ways for informative health dialogues that can assist community members in making better health choices. It apparently seems as though this study's findings differ from the findings of previously noted studies, which investigated the same aspect. However, since this study did not make use of a large sample it is imperative that more diabetes awareness efforts are administered in the communities of Botshabelo and Thaba 'Nchu where this study was based before conclusive comments can be made.

A high correct response rate (89%) towards message *three* was found among the experimental group respondents of this study, at the pre-test phase, indicating that the baseline awareness level of respondents regarding message three was high. It appears as though experimental group respondents were of the opinion that diabetic people should exercise frequently. Moreover, respondents continued to enhance this standpoint post intervention right through to the 4-week post-test phase, with the percentage of correct responses remaining strengthened (97%). These findings suggest that the majority of the respondents seem to be aware of the importance of physical activity in the health and wellbeing of diabetes patients and diabetes management.

Two separate studies in Limpopo investigated people's perceptions on diabetes management, the findings of one study revealed that respondents in their study were in agreement that increased physical activity, medication adherence and a balanced diet were essential for diabetes management, and would decrease the risk of experiencing complications (Mshungane, Stewart & Rothberg 2012). In contrast, the results of the other study in Limpopo found that the respondents of the study did not believe that exercising would benefit them nor help manage diabetes (Shilubane, Netshikweta & Ralineba 2016). Another study investigating the same concept, among rural dwellers in the Eastern Cape, found that p respondents of the study were of the opinion that any form of physical activity would compromise the health of diabetes patients because they perceived diabetics as frail and susceptible to dizziness (Oloyede 2013: 91). Since these studies were all performed in South Africa, the

difference in opinion could perhaps be attributed to cultural differences, but further investigation could clarify this matter.

According to the findings of the current study, it appears as though respondents acknowledge the link between exercises, diabetes and good health. However, in spite of the respondents indicating a high response rate and increased levels of awareness regarding the importance of exercise, further investigations that will indicate how to motivate respondents, including those that are not diabetic to actually pair their displayed awareness with action by partaking in some or other exercise regime, may be necessary. Tessaro, Smith and Rye (2005: 20) mention that even though the general public and diabetic patients may be aware of the association between increased physical activity and the reduction of sugar levels, most people are reluctant to act on their recognition.

Incongruous responses to message four were found amongst the respondents of both groups in this study. Experimental group respondents responses at the baseline indicated that over 70% of the respondents provided correct responses for message *four* indicating awareness about the importance of weight loss in diabetes. In contrast to the experimental group, the baseline knowledge in the control group was poor (44%). Experimental group respondents' responded well to message four-post intervention indicating increased awareness among respondents. Surprisingly, experimental group respondent's responses at the 4-week post-test revealed that no differences were found in respondent's responses since it appeared as though respondents had reverted to their baseline responses (see chapter 4 table 4.2).

This finding seems to suggest that respondents who were not initially of the opinion that diabetic people should lose weight, but had a different perception after receiving an intervention, did not adopt the message over an extended period. This could

possibly imply that respondents could have strong convictions regarding their initial responses. The fact that no differences were observed in experimental group respondents responses between the pre and 4-week post-test phases for message *four* was not due to the folk media used to convey the intervention. The reason being that same traditional folk media technique (poetry) was used for message three, which indicated a very high response rate amongst respondents over a period of four weeks. It therefore appears as if the stern perception that diabetic people do not have to worry about losing weight observed amongst experimental group respondents, could possibly be influenced by widespread cultural perceptions of weight and body image that are prominent in black communities.

Various authors (Kruger, Senekal & Puoane 2005: 40; Puoane, Tsolekile & Steyn 2010: 32; Akinrinlola 2012: 3; Franklin, Allen Pickett & Peters 2015: online & Phajane 2016: 5) investigated and documented the possible effects that the perceptions which people hold regarding body size and image have on health interventions that aim to address non-communicable diseases in low-middle-income communities. As noted in the literature, chronic conditions are a large contributor to the strain placed on South African public health care systems. Interestingly, many of these chronic conditions, including diabetes, hypertension, heart disease and stroke among others, in most cases have obesity as a common risk factor (Akinrinlola 2012: 3; Draper, Davidowits & Goedecke 2014: 549. Puoane *et al* (2010: 32) investigated the beliefs about body size and image among black females in the rural areas of Western Cape. The findings indicated that a fraction of the respondents associated being obese with wealth and living a high quality lifestyle, while being “thin” was associated with ill health and the contraction of HIV\AIDS or TB. The same study also found that although respondents were knowledgeable about the health risks associated with being obese or overweight,

resistance to lose weight remained high because the perceived risk of being associated with HIV\AIDS or TB was too great (Puoane *et al* 2010: 29-32; Kruger *et al* 2005: 3). A study by Mungal –Singh (2016: online) stresses how difficult it is to persuade people, especially those in rural and low-middle income communities to shed kilograms because of the associations present in communities. Another study investigating obesity and its consequences in the Free State found that more than half of their female respondents were obese but did not perceive themselves as obese (Prinsloo, Joubert, Mohale, Nyindi Matu & Struwig 2011:367), indicating the persistent prevalence of misconceptions about obesity and its related complications.

Culture shapes perception (Puoane *et al* 2010: 32) and although this aspect was not investigated in this study, as communication practitioners it is vital to understand the norms, values and beliefs that drive certain beliefs/ perspectives/ behaviours amongst targeted respondents as suggested in the literature (Krige & Rensburg 201:78).

Several authors (Anderson, Vuuren & Learmonth 2013: 9; Venter, Walsh, Slabber & Bester 2009: 13; Hendley, Zhao, Vaccarino, Morris, Quyyumi & Gibbons 2011: online; Okop, Makumbang, Mathole, Levitt & Puoane 2016: 13) mention that the cultural perceptions that prevail in black South African communities are key contributors to the wide-ranging acceptance of obesity amongst the people living in these communities. These perceptions include the idea of larger, more voluptuous female silhouettes being more attractive because it is believed that being of a larger body shape serves as a symbol of higher social status, which is perceived as an indicator for a man's ability to support his family. The above noted, supports the presumption that a possible reason for the respondents of this study not showing any differences in responses at the 4 week-post-test phase to message *four*, could be related to cultural perception of body weight and image. Such perceptions accompanied with poor awareness about

the risks of being diagnosed with non-communicable diseases, necessitate for health interventions that educate black communities about the repercussions of creating environments where being obese and overweight is promoted through cultural values. Okop*, et al* (2016: 14) and Makamu (2014: online) mention that people do not perceive obesity as an illness and are therefore unable to recognise how it puts them at risk for being diagnosed with diabetes or any other chronic disease.

Currently, the most dominant perception reflected in previous studies reviewing people's perception of body size could possibly act as barriers towards health interventions seeking to address the negative effects that non-communicable diseases have in low-middle-income countries (Draper, et al 2014: 549). Therefore, understanding how weight is perceived amongst the communities of Botshabelo and Thaba 'Nchu should be considered as a point for future investigation.

The experimental group respondents' responses to message *five* indicated that respondents were well aware of the importance of taking medication even when you start feeling better, akin to control group respondents who also indicate positive awareness levels at baseline.

Of all six key diabetes messages, experimental group respondents had the highest baseline scores at message *five* (95%) and respondent's response rate was almost 100% correct post song/dance intervention (98%), see table 4.2 chapter 4. This indicated consistent knowledge throughout the first two evaluation phases of the study about the importance of diabetic patients taking their medication even when they do not feel sick. However, this perception weakened among experimental group respondents at the 4-week post-test phase. The percentage of correct responses lowered to a percentage slightly lower (94%) than what was obtained by experimental group respondents at the pre-test phase. This indicates that although the majority of

the experimental group respondents agree that it is important to adhere to your medication schedule, a portion of the respondents (6%) at the 4-week post-test phase did not seem to agree with message *five*. Jones, Treiber and Jones (2014: 528) mention that the practice of people not adhering to their medication schedule is not a new problem, it prevails on a global scale and it continues to contribute to problems relating to poor health outcomes.

Several studies investigating this seemingly universal practice have revealed that poor health literacy, lack of knowledge about the complications of discontinuity and forgetfulness amongst others, are some of the prominent reasons as to why people do not adhere to their medication schedules (Jones, et al 2014: 529; Adisa & Fakeye 2014: 4; Aghoja, Avwenaghagha & Ogba 2016: 96). It is reported that more than half the time, patients do not adhere to their medication schedules as advised by medical practitioners and on some occasions, this is an intentional choice made by patients (Brown, Bussell, Dutta, Davis, Strong, & Mathew 2016: online). A study by Mshungane, et al (2012: online) in Limpopo found that diabetic patients in their study did not understand why they should take their medication when they did not feel sick which, often led to them stopping their medication schedule.

Brown, et al (2016: online) note that people are secretive about their medication behaviour which often makes it difficult to diagnose the causes of complications when they start to arise because of medication discontinuation. Atinga, et al (2018: online) suggest that being familiar with patients' ethnic profiles and understanding their cultural perspectives and norms related to medication regimes, would be a good starting point for developing constructive prescription counselling. This upholds the aforementioned opinions of Rensburg and Krige (2011: 78) who mention that the formation of mutual understandings in health communication and sustainable

engagement between health practitioners and respondents can only be achieved once all parties reach a holistic understanding of how respondents internalise health related information.

Experimental group respondents' responses to message *six* showed a high response rate at the pre-test phase (70%), indicating that they were aware of the importance of diabetic people having to eat smaller meals throughout the day, whilst the baseline awareness in control group was much lower (41%), refer to chapter 4, table 4.2. Nevertheless, experimental group respondent's responses improved post intervention (93%) and weakened slightly at the 4-week post-test phase (78%) however, still presenting a high correct response rate. This indicates that experimental group respondents responded well to message six, however increased intervention efforts to raise awareness and educate individuals and communities about the instrumental role that eating appropriate rations of food at regular intervals has on managing diabetes may be necessary in the communities of Botshabelo and Thaba 'Nchu.

The next section of this chapter will describe respondents' responses to the traditional folk media intervention techniques used to convey the above-mentioned key diabetes messages.

5.1.3 Theme 2: Respondent's responses to traditional folk media interventions

As mentioned previously, the responses of respondents in both the control and experimental group were not homogeneous at the baseline (see table 4.2). As a result, the change in each respondent's responses per message was compared from the pre to 4-week-post-test within each group and the results from the paired comparisons per

group were then compared to determine changes in respondent's responses between the control and experimental groups across the pre and 4-week post-test phases.

The changes in respondent's responses from the pre to the 4-week post-test phases within the experimental group for message *one* and *two* indicated statistical significance and the change calculated across the control and experimental groups for message *one* akin (see table 4.3). Respondent's seemed to better remember messages *one* and *two*, conveyed through storytelling with an observed increase of 33% and 17%, respectively in respondent's correct responses from the pre to the 4-week post –test phases (see table 4.2). This indicates promise that traditional folk media like storytelling could possibly hold greater potential over other folk tools for being used as a vehicle for conveying health promotion messages that motivate individuals and communities towards accepting social and developmental changes.

These findings support the assumptions of Kumar (2006: 94), who mentions that storytelling, when used correctly indicates to be an effective tool for raising awareness and mobilising social change in communities. It appears as though the use of a storyline and characters that respondents can relate to, is a more effective approach to moving respondents emotionally and persuading them to internalise the message imbedded in the story. The storytelling intervention was conveyed to respondents in Sesotho and the names of the characters were commonly known Sesotho names, this could have possibly enhanced the connection that respondents made between themselves and characters in the story therefore, making it easier to remember. Neely (2016: online) states that storytelling is a sense making tool that encourages people to confront their illnesses. When people relate to the characters in the story being conveyed to them (Newkirk & Solomon 2017: 1) they are swept into the world of the story, where cognitive and emotional processes take place, resulting in improved

interest, understanding and engagement with the themes in the story (Neely 2016: online; Newkirk & Solomon 2017: 1).

A study investigating whether narratives can be effective for diabetes empowerment among African American females found that respondents reacted positively to interventions conveyed through storytelling. The same study revealed that respondents attitudes, behaviours and knowledge about diabetes had been positively influenced and that the stories increased respondent's intake and retention of new information, thus making the messages more memorable (Goddu, Rafel & Peek 2015: online). Results indicated that incorporating storytelling to convey intervention themes to respondents offered an innovative flexible approach towards a health promotion strategy against the mitigation of health inequalities (LeBron, Schulz, Bernal, Gamboa, Wright, Sand, Valerio & Caver 2014: 213).

Manchaiah and Zhao (2012: 327) mention that storytelling holds great advances for communicating complex information in an unambiguous, context sensitive and meaningful manner. It appears as though a considerable number of studies around the globe have found success in using storytelling as a mode for conveying health information in order to educate and create awareness amongst target audiences. Various authors are in agreement about the power invested in storytelling as a tool for health promotion and have documented these advances well. However, the same authors mention that folk strategies are more effective when applied to cultures and communities that have existing oral traditions. (Houston, Allison, Horn, Sussman, Holt, Trobaugh, Salas, Pisu, Cuffee, Larkin, Person, Barton, Kiefe & Hullett 2011: 83; LeBron, et al 2011: 213).

Statistical significance in the change from the pre to the 4-week post-test phases was observed in experimental group respondent's responses to message *three,* conveyed

through poetry. As noted in the discussion at **5.1.3**, control group respondents indicated an unexpected heightened increase of awareness in some diabetes messages, see table 4.2. Message *four* presented through poetry was one of these messages and as a result, statistical significance was observed within the control group in the change from the pre-to the 4- week post-test phases. No statistical significance was observed in experimental group respondent responses at message four, however statistical significance was observed in the change calculated across the control and experimental group respondents' responses from the pre to the 4-week post-test phases (see table 4.3). Therefore, the statistical significance observed at message *four* conveyed through poetry may be as a result of the unexpected responses to message *four* in control group respondents. Nevertheless, the increase in experimental group respondents responses from the pre to the 4-week post-test phases at message *three* (6%) and the observed statistical significance (see table 4.2; 4.3) indicates that interventions conveyed through poetry have the potential for conveying health messages effectively. Even though this folk tool may require increased cognitive reasoning (Heath 2009: online) in comparison to storytelling. Poetry makes use of many metaphors and the message is not as explicit as in storytelling. Although messages delivered through poetry are powerful, audiences need to read between the lines for comprehension because poetry has philosophical elements embedded in it (Carli 2010: online). In consideration of the above-mentioned the messages conveyed through poetry interventions were kept extremely simple and delivered in respondent's mother tongue. This could have possibly made it easier for respondents to understand the messages being presented to them making it possible for the intervention to break through barriers and reach some respondents cognitive senses (Kumar 2006: 96). Apart from this study, several other studies (Ritu 2010;

Niguissie 2015; Kahssay 2017) have also had successful outcomes through using poetry interventions, seemingly making it an effective folk media communication tool.

Statistical significance in the change from the pre to the 4-week post-test phases was observed in control group respondents responses to messages *five* and *six* conveyed through song and dance (see table 4.3), presumably due the previously mentioned unexpected responses amongst control group respondents at the 4-week post-test (see table 4.2). No statistical significance was indicated for changes from the pre to the 4-week post-test for messages conveyed through song and dance in the experimental group and across the control and experimental group akin (see table 4.3). Although the findings indicate that experimental group respondents responses from the pre to the 4-week post test phase to message *five* practically stayed, the same respondents responses to message *six* indicated that respondents had an 8% increase in correct responses from the pre to the 4-week post-test phases over a period of four weeks (see table 4.2).

Seemingly, song and dance have the potential to effectively convey messages even though no statistical significance was observed in experimental group respondents for messages conveyed through this folk media. Traditional folk songs have been around for decades and the lyrics are often adapted to suit current issues or topics that need to be addressed (Nkoala 2013: 52). In this study, the popular tune of a Sesotho wedding song “Sana marena” was adapted and used to convey diabetes information, accompanied by knee dance that is popularly performed by Sesotho women termed “mokhibo”. Song /dance evoke strong emotions amongst respondents and bring about the sense of belonging (Kumar 2006: 95). This folk art is about not only the lyrical contents, but also elements such as cultural outfits, beadwork and cultural props such

as drums, sticks and spears amongst others as well as the perfection of folk dance move.

The absence of all the various elements that contribute to the folk song/dance experience could have possibly lessened the effects that the intervention had on respondents in this study, resulting in statistically insignificant changes in responses to messages conveyed through song and dance. This suggests that when using this traditional folk art, it would be ideal to include more people in the performance for example members of the community who can participate and enhance the delivery of the message being conveyed to respondents. Using this approach could possibly make the intervention more persuasive and encourage respondents to better recall the message being passed on in the song. This was not explored in the current study, but can be considered in future studies aiming at using song/dance to convey health messages. Furthermore, the use of a wedding song (melody) for a diabetes message could have also contributed to non-retention, as these two subjects are not normally associated. Once again, this opens up the possibility to investigate the importance of a specific melody in diabetes message deliverance.

The next section in this chapter will offer suggestions for future research, address the limitations and value of the study as well as summarise the study by providing final conclusions.

5.2 Recommendations and Conclusions

Traditional folk media clearly holds the potential to convey health communication messages across a wide spectrum of low-middle income communities, as is reflected in the discussion above. Folk art is trusted, respected and relatable to members of low-middle income communities thus making them credible sources for conveying new

ideas and information to stimulate progressive health and social development in these communities (Frishkopf, Zakus, Hamze, Alhassan & Zukpeni 56-58; Naskar 2011: 4; Yoshida, Kobayashi, Sapkota & Akkhavong 2012: 52; Kumar 2006: 94). In this study, the findings indicated that experimental group respondents had higher acceptance to messages conveyed through storytelling followed by poetry and song and dance, respectively. The results of the study suggest that traditional folk media have potential for being effective modes of communication in health promotion settings. However, more research is required to take full advantage of the promises that folk arts presents for health promotion intervention efforts. Based on the latter, the researcher offers recommendations for future studies below.

5.2.1 Suggestions for future research

Future research that is recommended is:

- Firstly, researches could consider using traditional folk media interventions, for example storytelling, not only as a source for conveying information to target respondents, but also as a source for collecting data from respondents prior to intervention efforts.

If this approach is adopted, researchers could possibly be better informed regarding existing perceptions and attitudes regarding topics to be addressed. The knowledge gained from listening to respondent's stories could then be incorporated into the interventions, possibly resulting in more customized and impactful intervention efforts for raising diabetes awareness in target communities.

- Secondly, in partnership with health care workers and community members, researchers can consider conducting studies that aim at increasing the

frequency of respondent's exposure to key diabetes messages through folk media interventions.

For example, a community poetry session could be presented at public health care services where poems provided by researchers are recited by different respondents in the waiting room once a week. This intervention could be administered for a period of six months, in an effort to raise long term diabetes awareness and reach as many people as possible. It should also be kept in mind that intervention techniques such as poetry, may require increased cognitive reasoning skills therefore, discussion sessions after the intervention are advised.

- Lastly, in collaboration with the Department of Health, community artists and dance groups, public health care services and health workers, community radio stations and community members; researchers can design folk media diabetes awareness street campaigns, that can be performed in various health care services during the month of November.

The Department of Health has identified November as the national diabetes month, proposing a diabetes awareness campaign will not only raise awareness on diabetes, motivate community participation and showcase community talent. It will also assist the Department of Health in achieving one of its long term strategic health goals of significantly reducing the prevalence of non-communicable diseases by the year 2030.

5.2.2 Limitations and value of the study

The chosen research design presented to be a limitation in the sense that the researcher had no control over all confounding variables; however, the design enabled the researcher to achieve the objectives set in the study and ultimately made it possible to answer the research question pertaining to the study.

Another limitation would be that respondents in this study were sampled conveniently, this meant the researcher had no control over the sample size, thus resulting in unequal respondent numbers in the control and experimental groups. Furthermore, this sampling technique restricts the researcher from generalizing the findings past the study sample. However, even though convenience sampling may be one of the weaker sampling techniques, it is still very reliable and enabled the researcher to sample a valuable number of respondents who came from the chosen population.

The findings of this study will contribute to the existing body of knowledge that aims to search for effective health communication strategies that can be used to convey health information that will lessen the effects of non-communicable diseases on populations and health care systems in Africa.

Increased use of traditional folk media as a tool for raising diabetes awareness in low-middle-income communities would be favourable for several reasons. For starters the application of interventions in the form of traditional folk media performances propagates the precise meaning of health messages to respondents, and decreases feelings of doubtfulness from community members. Secondly, using traditional folk media enhances the proximity between performers and audiences (Sharma 2015: 60) therefore making it easier for audiences to accept the messages delivered through this medium.

Lastly, when no differences are seen between the audiences and performers, audiences are in better positions to participate because they feel less threatened and are likely to absorb more information. This makes traditional folk media valuable tools for health promotion interventions. Additionally, traditional folk media are relatively inexpensive techniques for conveying health messages, which is a great advantage

considering the financially restricted health environment such as that found in the public health care services in the Free State and South Africa.

5.2.3 Closing arguments

The findings of this study indicate that traditional folk media can be used to measure the awareness levels of respondents in a community before and after intervention efforts. Moreover, the results of the study indicate that traditional folk media can be used to raise diabetes awareness amongst patients attending public health care services in a sub-district of the Free State Province.

Traditional folk media are close to the hearts and minds of the people. In applying the principles of strategic communication, through aligning intervention messages with appropriate contexts and choosing the most suitable folk media forms, this advantage can be used to its maximum potential. It seems as though folk arts can enable communication practitioners to successfully convey messages that promote sustained social and economic changes in communities (Sharma 2015: 59) while maintaining elements of cultural sensitivity.

Folk media performances allow for interpersonal interactions between the researcher, performers and respondents, meaning misinterpretations can be minimised instantly and barriers can be demolished through the entertaining and emotional effects that folk arts have on people (Mohanty & Parhi 2011: online; Sharma 2015: 60; Schiavo 2016: 234). Its application could pave the way for extended community participation and motivation in development programs. Literature suggests that development programs that make use of traditional folk media have greater potential to result in intervention outcomes that have long term behavioural gains at different levels of society. In agreement, Liu (2012: online) mentions that social change does not occur

at the individual level, therefore intervention strategies that address community norms, values and ideologies in appropriate cultural, social and economic contexts can empower people towards social development. Using traditional folk media tools presents an opportunity to facilitate environments that could bring about desired intervention outcomes.

5.3 Summary

In this chapter, a discussion on the respondent's demographics in relation to the Free State province demographics was provided followed by discussions on respondent's responses to key diabetes messages and responses to traditional folk media interventions, respectively**.** Traditional folk media have the potential to be used as effective modes of communication. Based on the results of respondents in this study and previous studies, it can be said that traditional folk media seem to embody great advances for health communication intervention efforts. Its ability to bridge socio-economic gaps, connect people and cultures and break through barriers in the most simplistic forms while still maintaining strong cultural significance, is an indication that traditional folk media is very useful and should be preserved across cultures.

"The arts, like language, emerged spontaneously and universally in similar forms across cultures, employing imaginative and intellectual capacities that have clear survival value."

-Denis Dutton

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ETHICAL CLEARANCE

Faculty of the Humanities

04-Dec-2017

Dear Miss Radebe

Ethics Clearance: **The use of traditional folk media to convey diabetes messages at public health care services in the Free State**

Principal Investigator: **Miss Daluvuyo Radebe**

Department: **Communication Science (Bloemfontein Campus)**

APPLICATION APPROVED

With reference to your application for ethical clearance with the Faculty of the Humanities. I am pleased to inform you on behalf of the Research Ethics Committee of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2017/1395**

This ethical clearance number is valid for research conducted from 04-Dec-2017 to 04-Dec-2018. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

Prof. Robert Peacock
Chair: Research Ethics Committee
Faculty of the Humanities

Office of the Dean/Kantoor van die Dekaan/Ofisa ya Dine
T: +27 (0)51 401 2240 | F: +27 (0)51 401 7363 | E: humanities@ufs.ac.za
P.O. Box/Posbus 339 | Bloemfontein 9300 | South Africa/Suid-Afrika | www.ufs.ac.za

HSREC113 FINAL APPROVAL

UFS·UV
HEALTH SCIENCES

IRB nr 0000624C
REC Reference nr 230408-011
IORG0005187
FWA00012784

19 October 2016

DR M REID
SCHOOL OF NURSING
IDALIA COOTS BUILDING
FACULTY OF HEALTH SCIENCES
UFS

Dear Dr M Reid

HSREC 113/2016
SCHOOL OF NURSING
PROJECT TITLE: A HEALTH DIALOGUE MODEL FOR PATIENTS WITH TYPE-2 DIABETES: A FEASIBLE STUDY

1. You are hereby kindly informed that, at the meeting held on 18 October 2016, the Health Sciences Research Ethics Committee (HSREC) approved the above project after all conditions were met.
2. The Committee must be informed of any serious adverse event and/or termination of the study.
3. Any amendment, extension or other modifications to the protocol must be submitted to the HSREC for approval.
4. A progress report should be submitted within one year of approval and annually for long term studies.
5. A final report should be submitted at the completion of the study.
6. Kindly use the **HSREC NR** as reference in correspondence to the HSREC Secretariat.
7. The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH GCP E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

Yours faithfully

DR SM LE GRANGE
CHAIR: HEALTH SCIENCES RESEARCH ETHICS COMMITTEE

Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences
T: +27 (0)51 401 7394/7396 | F: +27 (0)51 444 4059 | E: ethicsthsgen@ufs.ac.za
Block J, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa
www.ufs.ac.za

ADDENDUM 3

DEPARTMENT OF HEALTH APPROVAL

health

Department of Health
FREE STATE PROVINCE

15 September 2016

Dr M Reid
School of Nursing
Faculty of Health Science
UFS

Dear Dr M Reid

Subject: A health dialogue model for patients with type-2 diabetes: A feasible study.

- Permission is hereby granted for the above – mentioned research on the following conditions:
- Participation in the study must be voluntary.
- A written consent by each participants must be obtained
- Serious adverse events to be reported and/or termination of the study.
- Please ensure that buy in of the Program Managers, District Managers and facility staff is obtained before implementation.
- Ascertain that your data collection exercise neither interferes with the day to day running of the facilities nor the performance of duties by the respondents or health care workers.
- Confidentiality of information will be ensured and no names will be used.
- Research results and a complete report should be made available to the Free State Department of Health on completion of the study (a hard copy plus a soft copy).
- Progress report must be presented not later than one year after approval of the project to the Ethics Committee of the University of the Free State and to Free State Department of Health.
- Any amendments, extension or other modifications to the protocol or investigators must be submitted to the Ethics Committee of the University of the Free State and to Free State Department of Health.
- **Conditions stated in your Ethical Approval letter should be adhered to and a final copy of the Ethics Clearance Certificate should be submitted to** khusemj@fshealth.gov.za or sebeelats@fshealth.gov.za **before you commence with the study**
- No financial liability will be placed on the Free State Department of Health
- Please discuss your study with the institution managers/CEOs on commencement for logistical arrangements
- Department of Health to be fully indemnified from any harm that participants and staff experiences in the study
- Researchers will be required to enter in to a formal agreement with the Free State department of health regulating and formalizing the research relationship (document will follow)
- You are encouraged to present your study findings/results at the Free State Provincial health research day
- Future research will only be granted permission if correct procedures are followed see http://nhrd.hst.org.za

Trust you find the above in order.

Kind Regards

Dr D Motau
HEAD: HEALTH
Date: 19/9/16

Head : Health
PO Box 227, Bloemfontein, 9300
4th Floor, Executive Suite, Bophelo House, cnr Maitland and, Harvey Road, Bloemfontein
Tel: (051) 408 1537 Fax: (051) 408 1556 e-mail sebeelats@fshealth.gov.za@fshealth.gov.za/chikobvup@fshealth.gov.za

www.fs.gov.za

DISTRICT MANAGER APPROVAL

health
Department of Health
FREE STATE PROVINCE

17 August 2017

Lesego Radebe

Communication Science Department

Humanities Faculty

UFS

TRADITIONAL FOLK MEDIA TO CONVEY DIABETES MESSAGE AT PUBLIC HEALTH CARE SERVICES IN THE FREE STATE

Permission is hereby granted to Lesego Radebe to conduct the abovementioned study at the following health care facilities in Mangaung Metro:

1. Botshabelo Local area
2. Thaba Nchu Local area
3. Gabriel Dichabe clinic

Please communicate the outcomes of your study to the Department of Health, Free Sate for the benefit of the department.

Thank you

.....

Mr BS Ramodula

Acting District Manager

Mangaung Metro

Mr. BS Ramodula Acting District Manager: MMetro
PO Box 441, Bloemfontein, 9300
HSPC Building, Bloemfontein, 9300
Tel: (051) 4472191,

INFORMATION LEAFLET (ENGLISH/ SESOTHO)

TITLE OF RESEARCH- The use of Traditional Folk Media to convey Diabetes messages at health care services.

PRINCIPLE INVESTIGATOR\ RESEARCHER(S) NAME(S) AND CONTACT NUMBER(S):

Lesego Radebe 2010160667 0783075842

FIELD ASSISTANT:

Constance Tsokodibane 071 449 0535

FACUALTY AND DEPARTMENT:

Humanities

Communication Science Department

STUDYLEADER(S) NAME AND CONTACT NUMBER:

DR M Krige 051 401 2291

Dr M Reid 051 401 9747

Good day

I, Lesego Radebe, am doing research on the use of traditional folk media like: song & dance poetry and storytelling to send across six key diabetes messages in order to increase awareness on diabetes in a community.

ADDENDUM 5

This study forms part of a multi phased project which has been granted overall ethical clearance by the Department of Health Sciences Research Ethics Committee. A copy of this can be obtained from the researcher.

Approval number: HSREC113\2016

WHY ARE YOU INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

You have been invited to take part in this study because the researcher wants to increase awareness on diabetes in your community. This can only be done through working with people from the community which is why the researcher has invited you to participate in this study. The study will use between 180-300 respondents depending on the attendance rate at the clinics.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

The study has four phases:

Pre-test phase:

In this phase short statements about diabetes will be put to you in private and you will be asked to indicate if you agree or disagree by touching a coloured ball.

Intervention Phase:

Traditional folk media like: song & dance, poetry and a story will be used to send across six key diabetes messages through performances in the waiting area. A sticker will then be put on your clinic card to indicate that you have seen the interventions.

Post test phase:

The researcher will then repeat the statements that were put to you in the pre-test phase. This will again be done on a one on one basis after the interventions and you will again be asked to touch a coloured ball to indicate your response.

4week-post test phase:

After four weeks the researcher will visit the clinic again and you will be identified by means of the sticker that was placed on your clinic card. You will then be asked the same questions that were asked in the pre-test and the post -test phases.

The first three phases will take between 10-15 minutes and the last phase which will take place four weeks later will only take 5-10 minutes to be completed.

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?

Participation is voluntary and you may withdraw at any time, this will not lead to punishment or discrimination. If you agree to participate you will be given a consent form to sign however you will still be free to withdraw at any time.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

Taking part in this study will help you and your community in learning more about diabetes and raising awareness on it.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

The only inconvenience that respondents may experience is having to take the time to answer the pre and the post test questions but since participation is voluntary respondents will not be forced to do anything they do not want to.

There are no risks involved with this study, respondents will not experience discomfort or harm by participating.

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

Efforts to keep personal information confidential will be made. Respondents will not be required to state their names and the data obtained will be represented in terms of the group that participated and not based on individuals. The data from the study may be submitted for publication however individual respondents will not be identifiable in such reports.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Hard copies of your answers will be stored by the researcher for a period of five years and locked in a cupboard at their office for future research purposes and will not be accessed by persons who are not part of the study. All data will be destroyed after a period of five years.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

You will not receive any payment or incentives for participating in the study.

HOW WILL THE PARTICIPANTS BE INFORMED OF THE RESULTS OF THE STUDY?

If you would like to be informed of the final research findings please contact: Lesego on 0783075842\ 051 401-9063 or email: radebe.lesego324@gmail.com. Should you require any further information or want to contact the researcher about any aspect of

this study please contact Lesego on 0783075842 or email radebe.leseo324@gmail.com or contact the fieldworker Constance on 071 449 0535.

Should you have concerns about the way in which the research has been conducted, you may contact: Dr Krige on 051 401-2291 or email krigem@ufs.ac.za.

Thank you for taking time to read this information sheet and participating in the study.

PAMPITSHANA YA TLHAHISOLESEDING

THAETLELE YA PATLISISO

Tshebediso ya Diphatlalletso tsa Setso tsa Setjhaba ho hasanya melaetsa e mabapi le Lefu la Tswekere ditshebeletsong tsa tlhokomelo ya bophelo Foreistata.

MABITSO A MOFUPUTSI LE DI NOMORO

Lesego Radebe 0783075842

Constance Tsokodibane 0714490535

TSABETSO

Humanities

Communication Science

MABITSO LE DI NOMORO TSA MOETA -PELE EA HO ITHUTA

Dr M krige 051 401 2291

Dr M Reid 051 401 9747

PATLISISO KE ENG?

Patlisiso ke nto e etswang ho fumana tsebo e ncha mabapi le hore lefatsi le dintho tse lefatsing di sebetsa jwang.

SEPHOE SA DIPATLISISO

Sephoe sa phuputso ena ke ho bona hore ho sebedisa diphatlalletso tsa setso tsa setjhaba ho ka thusa ka ho eketsa temoho e mabapi le lefu la tswekere setjhabeng.

Dumela

Nna, Lesego Radebe, ke etsa patlisiso e mabapi le tshebediso ya diphatlalletso tsa setso tsa setjhaba tse jwalo ka: dithothokiso tsa pina le tantshi le ho phetwa ha dipale ho romela melaetsa e tsheletseng ya bohlokwa ya lefu la tswekere e le ho eketsa temoho e mabapi le lefu la tswekere setjhabeng.

Phuputso ena e theha karolo ya projeke ya mekgahlelo e mengata e fuweng kananelo e akaretsang ke ba boitshwaro tshebetsong ba Komiti ya Boitshwaro Tshebetsong ya Dipatlisiso ya Lefapha la Disaense tsa Bophelo bo Botle. Khopi ya yona e ka fumanwa ho tswa ho mofuputsi.

Nomoro ya tumello: HSREC113\2016

KE HOBANENG O MEMELWA HO NKA KAROLO PROJEKENG EE YA PATLISISO?

O memetswe ho nka karolo phuputsong ena hobane mofuputsi o batla ho eketsa temoho e mabapi le lefu la tswekere setjhabeng sa heno. Sena se ka etswa feela ka ho sebetsa le batho ba tswang setjhabeng e leng ka hona mofuputsi a o memileng ho nka karolo phuputsong ena. Phuputso e tla sebedisa dipakeng tsa bankakarolo ba 180-300 ho ipapisitswe le sekgahla sa ho etela ditleliniki.

SEBOPEHO SA BONKAKAROLO PHUPUTSONG EE KE SEFE?

Phuputso ena e na le mekgahlelo e mene:

Mokgahlelo wa pele ho teko:

Mokgahlelong ona o tla botswa dipolelo tse kgutshwane tse mabapi le lefu la tswekere ka lekunutu mme o tla kotjwa ho bontsha haeba o a dumellana kapa o a hanyetsana ka ho thetsa bolo e nang le mmala.

Mokgahlelo wa Tharollo:

Diphatlalatso tsa setso jwalo ka: pina le tantshi, dithothokiso le pheto ya dipale di tla sebediswa ho romela melaetsa e tsheletseng ya bohlokwa ka dipontsho tse etswang sebakeng sa ho ema sa baeti. Jwale setikara se tla manehwa kareteng ya tleliniki ya hao ho bontsha hore o bone ditharollo.

Mokgahlelo wa pele ho teko:

Mofuputsi o tla pheta dipolelo tseo a di entseng ho wena mokgahlelong wa pele ho teko. Sena se tla etswa hape kopanong ya motho le motho ka mong kamora ditharollo mme o tla kotjwa hape ho thetsa bolo ya mmala ho bontsha karabelo ya hao.

Mokgahlelo wa kamora teko:

Kamora dibeke tse nne mofuputsi o tla etela tleliniki hape mme o tla tsebahatswa ka setikara se neng se behilwe kareteng ya hao ya tleleniki. Jwale o tla botswa dipotso tse tshwanang tse botsitsweng pele ho teko le mekgahlelong ya kamora teko.

Mekgahlelo e meraro ya pele e tla nka dipakeng tsa metsotso e 10-15 mme mokgahlelo wa ho qetela o tla ba dibekeng tse nne hamorao mme e tla nka metsotso e 5-10 feela hore e phethwe.

NA MONKAKAROLO A KA IKGULA PHUPUTSONG?

Bonkakarolo ke ba boithaopo mme o ka ikgula ka nako efe kapa efe, sena se ke ke sa o bakela kotlo kapa kgethollo. Haeba o dumela ho nka karolo o tla fuwa foromo ya tumelo hore o e saene, leha ho le jwalo o ntse o tla lokoloha ho ka ikgula ka nako efe kapa efe.

MELEMO E KA NNANG YA BA TENG HO TSWA HO NKENG KAROLO PHUPUTSONG EE KE EFE?

Ho nka karolo phuputsong ena ho tla thusa wena le setjhaba sa heno ho ithuta haholwanyane mabapi le lefu la tswekere le ho tsosa temoho e mabapi le yona.

MELEMO E LEBELETSWENG YA HO NKA KAROLO PHUPUTSONG EE KE EFE?

Bothata bo le bong boo bankakrolo ba ka bang le bona ke ho ipha nako ya ho araba dipotso tsa pele ho teko le tsa kamora teko empa hobane bonkakarolo ke ba boithaopo bankakarolo ba ke ke ba tlangwa ho etsa letho leo ba sa le batleng.

Ha ho dikotsi tse amehang tse mabapi le phuputso ena, bankakarolo ba ke ke ba ba le makukuno kapa ho lemala ka lebaka la ho nka karolo.

NA SEO KE SE BUANG SE TLA BOLOKWA SEPHIRING?

Boiteko ba ho boloka tlhahisoleseding ya motho sephiring bo tla nkuwa. Bankakarolo ba ke ke ba hlokwa ho bolela mabitso a bona mme lesedi le fumanweng le ke ke la tekwa ho latela sehlopha se nkileng karolo e seng ho latela batho. Lesedi le tswang phuputsong le ka nna la romelwa bakeng sa phatlalatso, leha ho le jwalo bankakarolo ka bo-mong ba ke ke ba tsebahatswa ke ditlaleho tse jwalo.

TLHAHISOLESEDING E TLA BOLOKWA JWANG LE HO SENNGWA QETELLONG?

Dikhopi tsa mongolo tsa dikarabo tsa hao di tla bolokwa ke bafuputsi nako ya dilemo tse hlano le ho notlellwa khaboteng ofising ya bona bakeng sa merero ya dipatlisiso

tsa kamoso mme di ke ke tsa fihlellwa ke batho bao e seng karolo ya phuputso. Lesedi le tla senngwa kamora dilemo tse hlano.

NA KE TLA FUMANA TEFO KAPA DIHLAPISO TSA LETHO BAKENG SA BONKAKAROLO PHUPUTSONG EE?

O ke ke wa fumana tefo efe kapa efe kapa dihlapiso bakeng sa ho nka karolo phuputsong ena.

BANKAKAROLO BA TLA TSEBISWA JWANG KA DIPHETHO TSA PHUPUTSO EE?

Haeba o batla ho tsebiswa ka ditshibollo tsa bofelo tsa patlisiso, ka kopo ikopanye le: Lesego ho 0783075842\ 051 401-9063 kapa imeile: radebe.lesego324@gmail.com. Haeba o hloka tlhahisoleseding e eketsehileng kapa o batla ho ikopanya le mofuputsi mabapi le ntlha efe kapa efe ya phuputso ena ka kopo letsetsa ho 0783075842 kapa romela imeile ho radebe.leseo324@gmail.com.

Haeba o na le dingongoreho mabapi le tsela eo ka yona patlisiso e entsweng ka yona, o ka nna wa ikopanya le: Ngaka Krige ho 051 401-2291 kapa ka imeile ho krigem@ufs.ac.za.

Re leboha ha o nkile nako ya hao ho bala pampitshana ena ya tlhahisoleseding le ho nka karolo phuputsong.

CONSENT FORM (ENGLISH/SESOTHO)

CONSENT TO PARTICIPATE IN RESEARCH

I have been asked to participate in a research study titled: The use of Traditional Folk Media to convey Diabetes Messages at Health Care Services in the Free State.

I have been informed about the study by……...

My participation in this research is voluntary, and I will not be penalised or discriminated against if I wish to not participate or decide to withdraw from the study. If I agree to participate, I will be given the participant information sheet, which is a written summary of the research. I understand that I will not receive any financial benefits for my participation in this study and it will not cost me anything.

The research study including the above information has been verbally described to me. I understand what my participation in the study means and I voluntarily agree to participate. I have received the information sheet and understand the contents.

Signature of Participant **Date**

…….. ……...

Full Name(s) of Researcher(s)\ fieldworker……

Signature of Researcher/fieldworker

…… **Date** …….

TUMELLO EA HO NKA KAROLO LIPHPHUTSONG

Ke kopoue ho nka karolo liphuputsong ka sehloho sena:

Ke tsebisitsoe ka boithuto ke ……

Ho nka karolo ho aka liphputsong tsena ke boithaopo, hap eke tla fumana kotlo kebe ke amohuoe melemo ha ke hana ho nka karoloka hake khetha ho khoatsa ho nka karolo. Haeba ke dumela ho nka karolo, ke tla fuoa pampiri ea tlhahiso leseling e aba-nka karolo, eleng kakaretso ea ea lipuphutso. Kea utloisisa hore hakena pataloa ho nka karolo boithutong bona le hore ha kena patala letho.

Boithuto ba liphuputso ho keneletsa le tlhahiso leseling eka holimo li hlakikisitsoe ka puisano ho ‘na. Ke utloisisa seo ho kena ho aka boithutong bona ho se bolelang hapeke dumela ka boithaopo ho nka karolo. Ke fumane pampiri ea tlhahiso leseling ebile ke utloisisa tse ngotsoeng.

……

Tekenop ea mtho ea nkang karolo …….

Letsatsi

Mabitso a boithuthi……

Tekenop ya boithuthi

…… ……

Letsatsi

DIABETES RELATED PRE, POST & 4- QUESTIONNAIRE (ENGLISH/SESOTHO)

Participant Number | | | |

Name of facility .....

Date of completion (yyyy\mm\dd)

Pre-test	**Post-test**	**4Week post-test**

Respondent Profile:

1. **Please specify your gender**

1	Male
2	Female

2. **How old are you in years?** .....

DIABETES RELATED PRE\POST AND 4WEEK POST- TEST STATEMENTS:

1. Diabetic people should avoid social gatherings
2. Not all diabetic people go blind or lose a leg or arm
3. Diabetic people should not exercise regularly
4. Diabetic people do not have to worry about losing weight
5. Diabetic people should take diabetes medication even when don't they feel sick
6. Diabetic people should not eat one big meal a day

Pre-test responses

Question	True (red-ball)	False (Blue ball)
1		
2		
3		
4		
5		
6		

Post-test responses

Question	True (red-ball)	False (Blue ball)
1		
2		
3		
4		
5		
6		

4Week Post-test responses

Question	True (red-ball)	False (Blue ball)
1		
2		
3		
4		
5		
6		

DIABETES RELATED PRE, POST & 4-WEEK- POST TEST QUESTIONNAIRE (ENGLISH/SESOTHO)

Nomoro ya monkakarolo | | | |

Lebitso la thliniki.....

Letsatsi (yyyy\mm\dd

Pele teko	**Mor'a teko**	**Beke tse 4 mor'a teko**

Ka kopo qaqisa bong hao

1	Ntate
2	Mme

1. **U lilemo li kae lilemong?**.....

DIABETES RELATED PRE\POST AND 4WEEK POST- TEST STATEMENTS:

1. Batho ba nang le lefu la tswekere ba qobe ho eba dikopanong tsa setjhaba
2. Hase batho kaofela ba nang le lefu la tswekere ba foufalang kapa ba lahlehelwa ke leoto kapa letsoho
3. Batho ba nang le tswekere ba se ke ba ikwetlisa ka mehla
4. Batho ba nang le tswekere ha ba tlameha ho kgathatseha ke ho fokotsa mmele
5. Batho ba nale tswekere ba tlameha ho noa meriana le ha ba sa ikutloe ba kula
6. Batho ba na le tswekere ha ba tlameha hoja dijo tse ngata ha ngwe ka le tsatsi fela

Karabelo tsa pele ho teko

Potso	Eya (Bolo e gubedu)	Thje (Bolo e putsoa)
1		
2		
3		
4		
5		
6		

Karabelo tsa ka mor'a teko

Potso	Eya(Bolo e gubedu)	Thje (Bolo e putsoa)
1		
2		
3		
4		
5		
6		

Karabelo tsa dibeke tse 4 ka mor' a teko

Potso	Eya(Bolo e gubedu)	Thje (Bolo e putsoa)
1		
2		
3		
4		
5		
6		

INTERVENTION- STORYTELLING (ENGLISH\ SESOTHO)

Key messages

- ✓ Diabetics can live a normal life
- ✓ Batho ba nang le lefu la tswekere ba ka phela bophelo botlwaelehileng

- ✓ Diabetes can be controlled and complications managed
- ✓ Tswekere eka laoleha le mathata a yona aka laoleha le ona
- ✓

Intervention

A young girl named Vuyo always looked forward to the last Sunday of the month because her granny Mme Emma would take her along to her stokvel gatherings with the other ladies in her community.

Vuyo and her granny enjoyed these stokvel gatherings because all the ladies would bring their grandchildren, would prepare their best dishes and wore their best clothes too.

These afternoons would be filled with laughter, lots of food and great company, Vuyos' granny always looked forward to all the baked goodies the most.

However, for the past two months she has not been attending the gatherings and has not been her social self either.

Mme Mavis who lives next door and also attends the stokvel gatherings paid Vuyos' granny a visit to find out why she has not been attending the gatherings.

Mme Emma told mme Mavis that she had recently been diagnosed with type 2 diabetes and she did not see the point in attending the gatherings because she would not be able to enjoy the good food and that would make her feel like an outcast and that she realises that soon she may lose her eyesight or might need to have her leg or arm removed so she thought it would be better if she got used to staying alone at home because she knows that she can no longer live a normal life.

Mme Mavis looked at mme Emma and smiled slightly, she then told her that she had been living with type 2 diabetes for the past nine years and has not lost her eyesight or had any amputations. She explained that being diagnosed with diabetes is not a death sentence and that her life only changed for the better, she did not stop living her normal life instead she started taking better care of herself.

Mme Mavis explained that being diabetic does not mean you may not enjoy life as you know it, you just need to make small better choices, like choosing to eat one slice of your favorite cake at stokvel gatherings instead of having a slice of all the available cakes.

Mme Emma could not believe her ears and asked Mavis why she had never seen her sick. Mavis told her that as long as you take care of yourself you won't have to give up the life you know.

Mme Emma thanked Mavis for the visit and asked her to let the other ladies know that she would host the stokvel gathering from her house next Sunday.

Mme Emma then realised that diabetics can live a normal life and that diabetes can be controlled and complications managed and that if mme Mavis has been doing it for nine years she too could do it.

Sesotho Translation

Morwetsana ya bitswang Vuyo o ne a dula a labalabetse Sontaha sa ho qetela sa kgwedi hobane nkgono wa hae Mme Emma one a tsamaya le ena hoya stokfeleng le basadi ba bang ba motse.

Vuyo le nkgono wa hae bane ba natefelwa ke stokfela hobane kaofela basadi bane batla le ditlohoIo tsa bona, ba lokisa dijo tsa molemo wa ho fetisisa ba bile ba apara diaparotsa bona tsa molemo ka to fetisisa.

Thapama tsena di ne di tse ka Iethabo, dijo e le matletsetletse le ... Nkgono wa Vuyo one a dula a labalabela dimonate tse bakuweng.

Leha Kgwedi tse pedi tse fetileng a ne a saye stokfeleng a bile ase motho wa batho eo a tlwaetseng ho baena.

Mohaisane wa Mme Emma, Mme Mavis le ena o ya distokfeleng o ile a etela nkgono wa Vuyo ho fumana hore na ke hobaneng antse a saye dikopanong tsa stokfel.

Mme Emma o jwetsitse Mme Mavis hore o sa tswa ho fumana hore o na le mofuta wa bobedi wa tswekere mme one asa bone molemo wa ho ya dikopanong kaha one asa tlo kgona ho natefelwa ke dijo tseo a di ratang mme o ne a tlo ikutlwa e mokgelo ebile O hlokometse hore o foufala haufinyang Kapa a lahlehelwe ke leoto kapa sephaka jwale o nahanne ho betere a itlwaetse ho itulela ka tlung a le mong hobane watseba tore ha a sa tlo phela bophelo bo tlwaetehileng.

Mme Mavis O ile a sheba Mme Emma a tsheha hanyane ,a jwetsa Mme Emma hore ena o phetse le tswekere ya mofuta wa bobedi dilemo tse robong tse fetileng mme ha a so lahlehelwe ke pono, leoto, kapa, sephaka. o hlalositse hore ho eba le tswekere ha se kahlolo ya lefu ebile bophelo ba hae bo fetohile hantle kaha ha a tlohela ho phela bophelo bo tlwaelehileng empa o ile a qala ho itlhokomela betere.

Mme Mavis o hlalositse hore ho ba le tswekere ha ho bolele hore o ka se ke wa natefelwa ke bophelo jwalo ka ha o bo tseba, o hloka feela ho etsa diqeto tse nyane tse betere jwalo ka ho ja selae se le seng sa kuku stokfeleng ho nna le ho ja dikuku kaofele tse kopanong.

Mme Emma o ne a sa kgolwe seo a se utlwileng, a botsa na hobaneng a soka a a mo bona a kula. Mavis a mo jwetsa hore ha feela a itlhokomela ha ho hlokahale hore a tlohele bophelo bo o botlwaetseng.

Mme Emma o ile a Ieboha Mavis ka ho mo etela,a mo kopa hore bolelle basadi ba bang hare kopano ya stokfele e tla tshwarelwa ha hae Sontaha setlang.

Mme Emma a hlokomela hore batho ba nang le lefu la tswekere ba ka phela bophelo bo tlwaelehileng le hore tswekere eya laoleha ebile mme Mavis o e entsedilemo tserobong kaofela le ena a ka e etsa.

INTERVENTION- POETRY (ENGLISH\SESOTHO)

Key messages

- ✓ Take fast walks for 30 min on most days
- ✓ Tsamaea ka potlako letsatsi le leholo

- ✓ Lose weight as prescribed
- ✓ Theola boima ba 'mele joalokaha ho laetsoe

Intervention

Diabetes, diabetes

Oh my people, what a danger to our nation

A silent killer that sneaks up on our bodies like a thief in the night

Diabetes, diabetes

Oh my people what a threat to society

Disguised in comfort foods and basking in the sun

With it goes the lives of our brothers and sisters

Diabetes, diabetes

Oh my people what a danger to ourselves

Disguised in taking constant naps

After having afternoon snacks

Diabetes, diabetes oh what a danger you are

My brother, my sister it’s time to make a change

A change for your life

It’s time to take a walk, a walk for your life

It’s time to shed the weight do it all for your life

It’s time to take control, control of your life

At just one walk a day for 30minutes at least

You get to shed the weight and live a better life

But best of all

You gain control

Because my people, oh my people

Diabetes is after us all.

Sesotho Translation

Tswekere Tswekere

Aw batho ba heso kotsi ekana to setjhaba

Mmolai ya thotseng,ya nanyetsang mmele ya rona jwalo ka leshodu la bosiu

Tswekere Tswekere

Aw Batho ba heso tshosetso ekana setjabeng

O ipatile ... dijong le ora letsatsi

ka yona ho tsamaya maphelo a bo-ausi le bo-abuti

Tswekere tswekere

Aw batho ba heso ikotsi ekana ho rona

O ipatile borokong bo sa feleng

Ka mora dijo tsa motsheare

Tswekere Tswekere, Aw o kotsi e kana

Abuti waka, ausi waka ke nako ya ho etsa phetoho

Phetoho ya bophelo bahao

Ke nako ya ho ikwetlisa ka ho tsamaya, ho tsamaya hwa bophelo ba hao.

Ke nako ya ho fokotsa mmele bakery la bophelo ba hao

Ke nako ya ho nka boikarabelo ba bophelo ba hao

Ka ho ikwetlisa ka ho tsamaya bonyane metsotso e mashome a mararo

O tla gona ho fokotsa mmeli ebile ophele bophelo bo beteri

Empa ka ho fitisisa

O nka boikarabelo ba bophelo ba hao

Hobane batho beso, aw batho beso

Tswekere e ka tshwara mang kapa mang

INTERVENTION: SONG & DANCE (ENGLISH\SESOTHO)

Key messages

- ✓ Take medication as prescribed
- ✓ Noa meriana e beuweng

- ✓ Eat small regular meals
- ✓ Ja tse nyenyane lijo ka mehla

Intervention

Verse 1:

Life is good

Even if you are diabetic

Diabetes is no threat

Only if you listen to your doctor

Take it all the time as the doctor prescribed

Do not just take your medication when you feel

And just be like:

Chorus:

Life is good, life is good

Diabetes is no threat, its no threat

Not to me, not to me

(dance moves will be incorporated here)

Verse 2:

Life is so good

Even when you are diabetic

Diabetes is no threat

You just need to take care of yourself

Avoid eating one big meal

Instead eat small regular meals during the day

And just be like

Chorus

Life is good, life is good

Diabetes is no threat, its no threat

Not to me, not to me

(dance moves will be incorporated here)

Verse 3

Life is good

Even when you are diabetic

You should know that

Your life is in your hands

And if you don’t take care of yourself

Your body will not be fit

And you won’t be able to be like:

Chorus:

Life is good, life is good

Diabetes is no threat, its no threat

Not to me, not to me

(dance moves will be incorporated here)

Bridge:

Diabetes is no threat

You are in control of your life

Just listen to what the doctor tells you

You will enjoy life and just be like

Chorus

Life is good, life is good

Diabetes is no threat, its no threat

Not to me, not to me

(dance moves will be incorporated here)

Sesotho Translation

Temana ea 1

bo phelo bo monate

Le ha o nale tswekere

Tswekere ha se letho

Fela ha o mamaela ngaka ya hao

Ho batla o nke meriana ya hao ka mokgwa ao bolelang ka teng

E seng fela ha o kula

Ntse ore

K'horase

bo phelo bo monate, bo phelo, bo phelo

Tswekere ha se letho, ha se letho

Esing ho nna

(dance moves will be incorporated here)

Temana ea 2

Bo phelo bo monate

Le ha o nale tswekere

Twekere ha se letho

Ho tlamehile fela o ehlokomele

O seke wa ibopetsa ka lijo

empa o je ha nyane ha nyane ka letsatsi

Fela o ntse ore

K'horase

bo phelo bo monate, bo phelo, bo phelo

Tswekere ha se letho, ha se letho

Esing ho nna

(dance moves will be incorporated here)

Temana ea 3

Bo phelo bo monate

Le ha o nale tswekere

O hloka ho tseba hore

Bo phelo bo matsohog a hoa

Ebile ha o sa ehlokomele

Mmele wa hao ha o no matlafala

Ebile ha o tlo gona hore

K'horase

bo phelo bo monate, bo phelo, bo phelo

Tswekere ha se letho, ha se letho

Esing ho nna

(dance moves will be incorporated here)

Tswekere ha se letho

Ke wena molaodi wa bo phelo ba hao

mamela ngaka fela

O gone ho natefatsa bo phelo ba hao fela o ntse ore

K'horase

bo phelo bo monate, bo phelo, bo phelo

Tswekere ha se letho, ha se letho

Esing ho nna

(dance moves will be incorporated here)