

https://dspace.org/

The health seeking behaviours of People with food allergies

Gumbo, Jelika

2018
https://hdl.handle.net/10539/32825

Downloaded from a DSpace repository. https://dspace.org/

`THE HEALTH SEEKING BEHAVIOURS OF PEOPLE WITH FOOD ALLERGIES



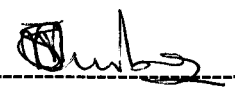
A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN HEALTH SOCIOLOGY

JELIKA GUMBO
1386860

SUPERVISOR: Professor Lorena Nunez
Co-Supervisor: Dr. Silvie Cooper

DECLARATION

I, Jelika Gumbo, candidate number 1386860, hereby declare that this research report is my own original work. A research report submitted in partial fulfilment of the requirements for the degree of Master of Arts in Health Sociology at the University of the Witwatersrand, Johannesburg. This report has not previously been submitted for any other degree or examination in any other University. Where I have used the work of other authors, I have properly acknowledged them and I have not copied any author or scholar's work with the intention of passing it as my own.

Signed: --------------------

On 05 Day of SEPTEMBER 2018

ACKNOWLEDGEMENTS

Glory be to God Jehovah the Almighty who guided me as I worked on this research project.

I greatly appreciate the encouragement and consistent feedback from my supervisors Prof. Lorena Nunez and Dr. Silvie Cooper. Thank you for your patience. You dedicated much of your time when dealing with my work; you provided feedback that made this work possible. Prof. Lorena you have encouraged me during hard times and that made me believe that there is nothing impossible, the strength that you gave made me to strive for better.

I wish to thank all my research contributors, the participants and colleagues who agreed to sit down and provide helpful involvement to this thesis. Honestly, without you this thesis would not been possible.

This thesis is dedicated to my mum Semukeliso Tshuma Gumbo and dad Joshua Gumbo for the excellent parenting role that you played in my life. Thank you for giving me all the strength to use education as a tool to overcome poverty. This work is also dedicated to my sister Juliet Gumbo Ngwenya, my aunt Eunice Tshuma, Gloria Mthupha Ndebele and all family members for helping, advising and encouraging me during difficult times.

I am grateful to my supporting friends Mcebisi Tshuma, Gugulethu Khumalo, Brendah Sibanda, Onesimo Ndebele and Brace Ngwenya. You are a family; my words cannot express how much I appreciate your encouragement and support. My sincere gratitude goes to Sedzani Malada and all members of Sociology Department at the University of Witwatersrand for the support as I was studying at this institution.

ABSTRACT

Studies on how food allergies impact on the quality of life of those affected have been mostly conducted in Western countries, only few studies have been conducted in Africa, This research sought to understand the health seeking behaviours of young people with food allergies in South Africa. The research employs a qualitative methodology that included auto-ethnography and semi-structured, open ended interviews conducted with a group of eleven students from the University of the Witwatersrand. Through auto-ethnography the researcher' own experience as somebody affected by food allergy is shared to facilitate eliciting the experience of the students. The focus on youth that are in transition from being dependents into adulthood allows to explore issues of self-care. The findings of this study revealed that, in face of a failure on the part of biomedicine to provide cure for this condition health seeking behaviours are influenced by social and cultural factors, including gender and economic factors. The lack of accurate diagnosis and effective treatment fuels different interpretations and the help seeking behaviours. These become especially interesting in the context of a diverse country such as South Africa.

Key words: Food allergies, health seeking behaviours, socio-cultural factors, food allergic individuals

Table of contents

CHAPTER 1: INTRODUCTION 1
1.1 My personal experiences of food allergies 1
1.2 Rationale 3
1.3 Importance of the study 4
1.4 Introducing food allergy, a life threatening condition that alters social life 5
1.5 Research question 6
1.6 Objectives 7
1.7 Report outline 7
CHAPTER 2: LITERATURE REVIEW 9
2.1 Introduction 9
2.2 Establishing working definitions 9
2.3 Environmental factors and changes in food production cause food allergies 11
2.4 Food allergies as a medical issue 14
2.4.1 Shortcomings of elimination diet method as cure to food allergies 15
2.4.2 Failures of biomedical treatment to food allergies 16
2.5 Self-management of chronic condition 17
2.5.1 Individual's searching for causes of symptoms 18
2.6 The use of complementary health care systems 21
2.7 Coping with food allergies 22
2.8 Young people with food allergies and risk-taking 23
2.9 Conceptual framework 24
2.9.1 Sociology of diagnosis as an approach 24
2.10 Conclusion 26
CHAPTER 3: RESEARCH METHODOLOGY 27
3.1 Introduction 27
3.2 Research design 27
3.3 Participants 29
3.4 Sampling technique 32
3.5 Data collection method 33
3.6 Data analysis strategy 34
3.7 Ethical considerations 35

3.8 Reflexivity 37
3.9 Limitations of the study 37
3.10 Conclusion 38
CHAPTER 4: FINDINGS AND ANALYSIS 40
4.1 Introduction 40
Sub-theme 2: Self-management of food allergies 41
4.2 Themes 42
4.3 The first stages of food allergies and the reaction of the social environment 42
4.4 Biomedicine as a primary health care 46
4.4.1 Biomedicine has no cure for food allergies, leaving the affected individuals with no answer 48
4.5 Socioeconomic status influence health seeking behaviours 52
4.6 Finding the allergen; changing the diet, the environment and asking for spiritual intervention 55
4.6.1 Misinformation and mislabelling of food products challenges the elimination diet method 58
4.7 (Mis)interpretations of food allergies 59
4.8 Gender differences in health seeking 68
4.9 Food allergies and impact on social relationship 69
4.9.1 Young people and risk-taking behaviours 72
4.9.2 Self-management of food allergies 75
4.9.3 Diverse ways of coping with food allergies 76
4.10 Conclusion 77
Bibliography 84

List of tables

Figure 1 The profile of the participants

Figure 2 Summaries of respondents' biographical information

Figure 3 Pictures of researcher when she had food allergy reactions

Figure 4 Family members had similar food allergies or related symptoms

CHAPTER 1: INTRODUCTION

1.1 My personal experiences of food allergies

I became allergic to spices and herbs at the age of 23 and faced physical, social, economic and cultural challenges.

On the first days when I started experiencing strange body symptoms such as itchiness and swelling of lips I ignored them and only later I consulted a pharmacist. When I started experiencing severe tonsillitis I thought maybe I was beginning to experience rheumatoid arthritis that I had before and suspected that the South Africa environment and rainy season was causing this. The allergy began in November soon after completing my final undergraduate exams, so I could return to Zimbabwe. However, a week after arriving, the allergy symptoms reappeared and became severe with my feet, hands, tongue, eyes, epiglottis and buttocks feeling itchy and swelling. This occurred in different days in a space of 5 days and disappeared within 2 days. I knew that something was wrong with my body and I could not blame the environment or season as I was now in Zimbabwe and the weather was very hot.

I was taken to a hospital as I could not sit or stand for more than 5 minutes because when I tried to, the small itchy balls that had developed became severe and hardened like stones. The doctor indicated that it was an allergy and that I should check the body lotions, soaps and all the types of drinks and foods that I eat and said it was my duty to jot that daily in my diary. I consulted different doctors and they confirmed that it was an allergy and should consult an allergy specialist for tests. I changed lotions, soaps and food after every 5 days as instructed by the physicians but we always included soups that had spices and herbs in the food so my allergy never stopped. I became worse despite the fact that I was taking the prescribed medication.

Early 2015, I travelled to South Africa for food allergy tests because I had noticed that the reactions were caused by what I eat and my family could not afford to help me do the tests in my country because the cost was around US$700 excluding consultation fee. In South Africa, I did food allergy blood tests and the allergen was not picked up. I

spent about 2 years jotting in my diary what I eat and I had completely eliminated food such as beef, chicken and beans because, often when I did not ingest these foods I did not experience the reactions.

Having food allergies caused a lot of problems in my life, some church members indicated that I was experiencing a generational curse or suggested I was bewitched while community members said the swelling of the feet was a clear indication that I should worship the ancestors. I was prayed for but the allergy reactions never ceased. As much as I tried to explain that doctors said it is an allergy and I will eventually find the allergen, very few believed and some men who saw me with swollen eyes or mouth in the streets passed comments like *"amadoda ayatshaya"* meaning man really physically discipline women. I did not have a chance to explain to everyone, so mostly I covered the affected part or cancelled my appointments to avoid people. I began to have problems with some of my friends because I always avoided eating out of my home or visiting them. I tried to work but I had to quit because I was always sick or unfit and others passed comments that sick people should not be employed because they affect progress. I became painfully aware of social implications of having this condition.

Being a Christian gave me hope that one day I will be healed. I used anointed materials, listened to messages from Dr. Prophet Shepherd Bushiri, meditated on the word of God and read the bible as this gave me strength and courage. I began to see my future rather than crying and questioning why I experienced all these problems. I started realising that alternative healing systems may be useful in providing individuals with hope and strength when experiencing health problems.

In 2016 I decided to enrol for Honours studies at Wits University with hope that I will make it. In August 2016 I discovered that I am allergic to spices and herbs because I ate KFC chicken and I had previously tried to re-introduce chicken and ate a boiled one with salt and never experienced allergy reactions. I tried other foods with spices and herbs and experienced severe allergy reaction. Finding the allergen was a 2 year difficult journey for me and this experience influenced me to conduct this study. My aim was to find out the experience of other youths who experienced food allergies, to contextualise

my experience among those of my peers, and hopefully discover various ways of handling these conditions.

1.2 Rationale

Food allergies have been perceived as rare in Africa; however, in the context of continuously increasing prevalence, there is a need to conduct studies that focus on this condition (Kung, Steenhoff and Gray, 2014). Studies that present what it is like to live with food allergies have been done mostly in Western countries, and this is exemplified by Peniamina Rama's (2014), and Nettleton, Woods, Burrows and Kerr's (2010) work on the impact of food allergies and intolerance on quality life. Although there is extensive research on food allergies, there are few studies that have been conducted in Africa, particularly South Africa. Existing studies look at the changes in the social behaviour of food allergic individuals, the challenges they face as they begin to restrict themselves from eating certain food, when they adjust their social life after developing allergy symptoms or having been diagnosed and when this condition is misinterpreted socially (Rama, 2014).

There are also few studies conducted with "transitionary" populations, like students who may have moved out of family living arrangements, and may be living in a university residence or on their own (John, Ahmed, Anjum, Kebab, Mohammed, Darwich and Sreedharan, 2014:4). Moreover, there are few studies done on health seeking behaviours of people with food allergies from the perspective of someone with this health condition (Miller, 2012).

Dean, Fenton, Shannon, Elliott and Clarke (2015) state that there are studies about experiences of living with food allergies but there are gaps in the understanding of social implications of having this condition. This research seeks to address this gap by looking at how social and cultural understandings of food allergies influence the health seeking behaviours of individuals with the condition, as well as it looks at the social impact of the condition in the social life of the affected individuals.

In medical sociology it is crucial to understand why people behave in certain ways and understand motivations behind actions concerning health and illness. I wanted to understand what triggers people's actions or behaviours in searching for the cause of symptoms and in trying to find the solution rather than just enquiring about challenges faced or caused by the illness. This means assessing various psychological, environmental, economic and socio-cultural factors that influence their behaviours (Amzat and Razum, 2014:46).

The objective of the research was to explore social and cultural factors that influence people's behaviours in seeking treatment when they start noticing allergy symptoms and why they choose specific healing systems or treatment measures. Wiley and Allen (2012) argue that culturally prescribed behaviours and beliefs contribute to health outcomes and diseases are interpreted within cultural contexts. Studies show that food allergies may be handled differently depending on individual's culture or ethnic background because of the distinct way of life these group may have. Culture can be defined as "the set of practices by which meanings are produced and exchanged within a group" (Williams, 1976:233 cited in Garuba and Raditlhalo, 2008:39). It is the unique values, life styles and beliefs that differentiate groups in South Africa and what defines their culture; for example, aspects such as the religious practices or gender ideologies of specific communities.

Garuba and Raditlhalo (2008) assert that culture is central and should always be understood in terms of context-specific application. The purpose of this study was to find out how food allergies are interpreted among a group of university youth in South Africa and how this influenced their health seeking behaviours, attending to the explanations they give to their condition.

1.3 Importance of the study

When searching for causes of illness symptoms individuals may be influenced by their cultural beliefs or the different ways which the symptoms are interpreted and treated. South Africa is a diverse community; therefore people might define food allergies

differently depending on their beliefs and young people may engage in risk behaviours when their peers influence them to eat different foods during their gathering or deliberately ingest offending food in trying to fit into that group culture and fearing being discriminated against. This has an influence on the individual's behaviour when searching for health care, which are the aspects that were dealt with in this study.

In South Africa, the prevalence of food allergies varies from 1% > 10% and these individuals have life styles that are threatened due to this condition (Gray, Goddard, Karabus, Kriel, Lang, Manjra, Risenga, Terblanche, Spuy and Levin, 2015). While the proportion of the population affected is small, the condition is serious as there is no biomedical medication that completely cures food allergies. This in turn encourages affected individuals not to only rely on health professionals for their problem but also consult other health care systems such as herbalists, prophets and traditional healers (Hiatt, 1986). This study is of importance as it gives a perspective from a group of African youths that hopefully will contribute to counter-balance Western focus currently dominating the field of food allergy research.

1.4 Introducing food allergy, a life threatening condition that alters social life

Living with food allergies presents a range of awkward situations and challenges in interacting with others around food preparation. To illustrate this from a personal experience, I may face many health challenges when I do not consider what was included in the preparation of food. In having to ask people how and what was included in the meal preparation, given that it is often done in my absence, I am often being met with little understanding and much curiosity about the amount of time I might take deciding what to eat. I always prefer to prepare my own meal because there is less risk but this threatens my social life as I fail to fully engage or eat with my peers and relatives. In doing this, my concern is to try to live healthily while avoiding food that cause an allergic reaction in my body that in turn bring physical, social, emotional and economic problems.

Mostly if food allergic individuals inhale, get into contact, or eat intolerable food, they may have to be rushed for medication or be taken to the hospital in an emergency

ambulance. Upon arrival, relief medication for the pain and itchiness may be provided, while other symptoms of swollen eyes, throat, tongue, epiglottis, tonsils, feet, lips, hands as well as nausea are left untreated. This shows how this condition threatens the health of individuals. I have been affected by the ingestion of some food and developed allergic reaction, moved from one health care system to another and failed to get a permanent solution. Dealing with such a chronic condition is problematic.

I chose to use my personal experience in order to better understand the subjective, emotional and cultural factors that influence behaviours of food allergic individuals and their choices of using specific health systems. In using this method, I am sharing rather than attempting to represent experiences of the condition. Auto-ethnographies "are highly personalised accounts that draw upon the experience of the author/researcher for the purposes of extending sociological understanding" (Sparkes, 2000:21). Further, "[p]ersonal narratives can address several key theoretical debates in contemporary sociology: macro and micro linkages; structure, agency and their intersection; [and] social reproduction and social change" that can inform an understanding of a set of experiences (Laslett, 1999:392). Ellis, Adams and Bochner (2011:274) state that when comparing auto-ethnography to other approaches of research, this method recognises and accommodates aspects of emotionality, subjectivity and the researcher's influence on the research. In the same vein, the research question and attendant sub questions to this research are outlined before rounding off with the study objectives.

1.5 Research question

What are the health seeking behaviours of university students, women and men (18-35 years old) with food allergies?

In trying to address the research question, the following sub-questions arose:

a) What are the social and cultural factors that influence people's behaviours in seeking treatment when they start noticing they are experiencing allergy symptoms?
b) Why do food allergic individuals choose specific healing systems or treatment measures in seeking help for their condition?

1.6 Objectives

a) To understand the socio-cultural changes and challenges that occur in the lives of food allergic individuals in trying to identify the causes of symptoms.
b) To establish the healing systems used by food allergic individuals and reasons for their choices.
c) To systematically collect data and information on how food allergic individuals cope with or manage the symptoms and how people in their social life define and react towards the illness.

1.7 Report outline

This introduction has provided my own personal experiences of living with food allergies. After giving the background to studies of food allergies as being dominated from Western countries, the study established a gap that warrants a sociological investigation from the global South. It therefore justified the need for a study of this nature which focuses on food allergies. The background, objectives and significance of the study pave way into the discussion of the relevant literature that allows to frame the intended objectives of the research. Chapter 2 provides a critical analysis on literature review teasing out the major arguments on food allergies and health seeking behaviours. I discuss related causes of food allergies including the medical diagnosis and treatment methods. Moreover, chapter 2 looks at how food allergies are handled before medical diagnosis, how cultural interpretations of illness symptoms influence health seeking behaviours, the complexities of food allergies and how affected individuals cope with a chronic condition after diagnosis. I also discuss sociology of diagnosis as an approach that helps to understand the importance of considering the social and cultural factors that influence health related behaviours because diseases and illnesses are defined, diagnosed and treated differently within their immediate settings when compared to the medical diagnosis.

Chapter 3 presents the research methodology used to explore the health seeking behaviours of young people with food allergies. The sampling methods, data collection, thematic analysis and ethical considerations are also presented. Chapter 4 presents the

findings of the study and discusses them in relation to literature and to the different concepts and theories presented in the framework. Some of the main themes emerging from this section include; biomedicine as a primary health care, socioeconomic status influence health seeking behaviours and (mis)interpretations of food allergies. Chapter 5 provides recommendations and conclusions informed by the study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents, relevant literature about food allergies, health seeking behaviours, the health seeking behaviours of food allergic individuals. It also presents the sociology of diagnosis approach and its suitability to this study is explored. Due to the increase of food allergies in Africa, a need to explore the factors that influence this condition and how this condition is mis(interpreted) within and outside the biomedicine arises. It is of importance to explore the reasons behind the choices to consult specific health care systems or to use certain remedies in trying find the causes of symptoms or to cope with food allergies. The literature presents how health practitioners and lay individuals handle or diagnose food allergies.

This chapter provides a review of literature on how illness symptoms are interpreted in the context of culture. It is crucial to understand the diversity in terms of how the symptoms are defined which influences individuals to use specific remedies or consult certain health care systems. Moreover, the issue of the transitioning from youth to adulthood is a critical stage within which peers influence and are co-influenced to conform to certain group norms like eating together as a symbol of solidarity. This allows to illuminate the social relationship between social environment and health as some of the youth affected by food allergies end up being exposed to eating offending foods that impact on their health and help seeking behaviours. This chapter presents what is known about the causes of this condition, the challenges that food allergic individuals face in trying to identify the allergen, the weaknesses of the primary health care system in treating this condition and self-management of chronic conditions. Literature consulted helps to explore the link between the socio-cultural factors and health seeking behaviours. To this turn I conceptualise key terms informing this study.

2.2 Establishing working definitions

In this research, food allergy refers to a reproducible adverse reaction caused by an immune response to a food or food component as defined by the World Health

Organisation (World Health Organization International Food Safety Authorities Network [INFOSAN], 2006; Sichere, 2016). Both immunoglobulin E (IgE) - mediated reactions (the reactions that occur within seconds, minutes or two hours after ingesting a culprit food) and non-IgE-mediated reactions (the reaction that occurs approximately four hours or days later after ingesting offending food) were included in this research. The allergen can enter into one's system through ingestion, contact and inhalation of the problematic food (Wood, 2011:53). Sicherer (2011) indicates that tree nuts, shellfish, fish, and cow's milk are the main allergies in the United States. However, it has been found that the main foods that cause allergies vary geographically for example; Indians have high prevalence of tree-nuts allergy when compared to other Asian ethnicities (Shek, Cabrera-Morales, Soh, Gerez, Ng, Yi and Lee, 2010).

Food allergies generate health problems, severe symptoms and in some cases death, so the cause consequently needs to be identified and prevented as early as possible. For example, anaphylaxis food allergy results in the swelling of lips and tongue, tightening of the throat, tummy ache, difficulty in breathing and losing consciousness within two hours if the allergen is absorbed within two hours of ingestion (Holland & Jarvis, 2007:97; Roberts, 1991:84). Wood (2011) stipulates that although food allergies lead to these different symptoms, it is not advisable to solely blame this condition, as it is crucial to explore other causes and cures and do medical allergy tests. This helps individuals to know if other medical and behavioural issues that occur are related to food allergies or other diseases.

Health seeking behaviours refer to the, "sequence of remedial actions that individuals undertake to rectify perceived ill-health" (Ward, Mertens and Thomas, 1997:11 cited in Mahmood, Iqbal, Hanifi, Wahed and Bhuiya, 2010:3). Various studies have demonstrated that one's decision to engage with a particular health system is influenced by a variety of socio-economic variables, such as sex, age, type of illness, access to services and the perceived quality of the service (Adhikari and Rijal, 2014:52). Cultural factors and health beliefs also influence the health seeking behaviours of individuals; attribution to witchcraft, punishment from God and ancestors all serves as examples of cultural beliefs regarding the aetiology of illness. If these beliefs hold, an individual's ill

health can be viewed as stemming from one's disobedience or failure to give sacrifice to the ancestors, and ill health can result as a form of punishment so that they can correct their mistake. In this perspective, the solution can only be received through spiritual intervention because the illness will have nothing to do with the physical body (Sylvia, 2000). It was the purpose of the study to understand what healing systems were used by food allergic individuals or if the condition was addressed as a spiritual, as a physical problem or both.

2.3 Environmental factors and changes in food production cause food allergies

Most food allergies are mediated by immune system after ingesting food that is perceived as "unsafe". Although the immune system is meant to protect the person from infections, abnormal immune response can lead to food allergy reactions, tissue injury and other related diseases (Murray and Pizzorno, 2012). A food allergy can occur when triggered by variety of stressors such as emotional and physical trauma, frequent consumption of a specific food and excessive use of drugs (Murray and Pizzorno, 2012:594).

Observational studies show that allergy appearance may be influenced by environmental exposure, such as the presence of pets and cats in the house (Wahn and Sampson, 2015:294). Pets protect individuals against allergies in general because they usually increase exposure to germs and induce immune tolerance (Wahn and Sampson, 2015:294). The immune system will be fending off those germs and not reacting to other allergies that it will be encountering (Shreffler et al., 2012:45). However, this theory has been criticised because evidence shows that members of poor communities habit environments with high bacteria and germs also experience food allergies thus showing that there are other explanations for food allergies (Shreffler et al., 2012:45).

The theory of changes in food manufacturing shows that methods of cooking and the modern way of processing food has led to the increase in food allergies. For example, in the United States the prevalence of allergy to peanuts is higher than China, although the Chinese eat as many peanuts as Americans. The explanation for this is the

difference in the method of preparing the peanuts; Chinese communities commonly boil the peanuts, while Americans roast them which may alter the proteins in peanuts to trigger allergic reactions and explain the reason why they have higher prevalence of food allergies than the Chinese (Shreffler et al., 2012). This analysis is important in the study of food allergies as it shows that different methods of food preparation may cause pathological reaction of the immune system.

The hazards from food production also include inappropriate animal feeding practices and genetically modified foods (GMOs). For example, the use of agrochemicals such as fertilisers in agricultural products resulted in foodborne diseases in the United Kingdom and many foods have been detected as having harmful chemicals (Sanders, 1999). The addition and removal of certain proteins from different plants and animals may end food allergies to other individuals and be a disease to others (Brown, 2007). For example, some people began to be allergic to soybeans after its modification as it contained Brazil-nuts proteins to which people were allergic. Although Brown (2007) says the true risk of food allergies from the GMOs remain unknown, it is possible that the prevalence of food allergies in South Africa is caused by GM crops because in 2013 alone, 2.9 million hectares of these crops were produced (Woolworths Food, 2017). This study sought to find how food allergies where interpreted in different communities or what was identified as the main causes of this health condition.

There is an international movement of GMOs; in mid-2002 Southern African countries such as Zimbabwe, Zambia, Malawi, Swaziland, Mozambique and Lesotho "faced imminent food shortages and famine" and received food aid that had GMOs from the United States (Counihan and Esterick, 2013:531). About 500, 000 tons of maize was sent to these countries and 75% of this contained GMOs; when these countries discovered this they expressed their concerns that it had potential environmental and health impacts such as allergies (Counihan and Esterick, 2013). Although they refused to accept the aid and requested the food products to be milled and labelled, there is a possibility that poor individuals or poor countries may sometimes remain with no choice but to eat offending food due to failure to access or afford other food. South Africa is

one of the countries with a high poverty rate and receives food aid from Western countries that contain GMOs which may explain why food allergy rate is increasing.

Studies show that we are experiencing more food allergies than our grandparents because in their diet they included more natural and seasonal foods than we do. Tobin (1994 cited in Counihan and Esterick, 2013), stipulate that globalisation has led to "glocalisation" of foreign foods products as it is now domesticated to local contexts. For example, the introduction of McDonalds in South Africa led some people to rely on fast foods, which are said to contain a lot of sugar and fats which contributes to ill-health such as food allergies. Moreover, migrating from the country of origin to another may cause individuals to eat new kind of foods and to use different ingredients such as spices when cooking leading the immune systems to react.

Globalisation also has an impact on the food production; the introduction of new foods or ingredients has contributed to the rise of food allergies in the 21st century. As Hadley (2006:1080) explain, 'In this era of globalisation, it is not only population that migrate but also foods, as people adopt foreign diets and import exotic products'. For example, the Americans never used to experience kiwi allergies as they never saw or ate them before but they began to experience it when this food was introduced to them. Peanut allergies are also on the rise in United Kingdom, Australia and Canada after introducing peanut butter (Hadley, 2006:1082). In a study of food allergies it is important to understand the globalisation of food because; it shows that the introduction of new foods or food ingredients may require antibodies to bind to these proteins which may eventually cause reaction of human immune systems.

The globalisation of food supply has also led to a large international trade in seafood species and products. Unfortunately this has added to food allergies among the consumers. For example, 80% of the United States seafood is imported and in 2004 about 6.5 million people were reported as having seafood allergy (Jedrychowski and Wichers, 2009:243). The World Wide Fund for Nature (WWF) says, "... the hake consumed by South Africans between 2000 and 2010 was imported, with more than 95 percent of the imported volume coming from Namibia. In terms of prawns consumed in South Africa, 62 percent originated from India in 2010, with volumes also from

Mozambique and Thailand" (du Plessis, 2014:2). Zinn and Potter (1997 cited in Jedrychowski and Wichers, 2009) assert that in a South African food allergy study, 105 individuals were tested for seafood allergy and 47% were sensitive to prawns and 44% to rock lobster. Although this figure might appear insignificant, imported seafood is among the list of the causes of allergies among the population of South Africa.

2.4 Food allergies as a medical issue

Fainzang and Haxaire (2011:66) assert that allergology uses the term allergy to refer to "tested immunological reactions of a specific kind (IgE reaction)" and food allergy as an immune system reaction that occurs after eating or drinking certain food(s) that will be assumed to be "unsafe" for the body. Food allergies are on the rise but it is challenging to assess them or to prove if they are real because there are difficulties in diagnosing this condition. It is therefore problematic to track the underlying causes and the changes in prevalence or the governments to pressure the food department to indicate all the food labels as some causes of the food allergy reactions remain unclear (Hadley, 2006).

There are many instances were food allergies are not medically recognised but defined as other diseases. Shreffler, Yuan and Asp (2012) state that the medical community also contributes to this problem of confusing people with food allergies and other health problems such as food intolerances. This is because food allergy tests such as skin-prick testing (SPT) and blood testing may lack accuracy or fail to pick the food that one is allergic to and some individuals receive a positive food allergy test but have less chances of having that allergy (Shreffler et al., 2012). The confusion of having positive food allergy tests as having an allergy lead the doctors to over-diagnose their patients (Shreffler et al., 2012). Moreover, there is debate about the gold-standard of testing (the double-blind placebo control) as the method could have limitations. Some studies indicate that this test is effective while others show that other allergy reactions such as hives may be caused by anxiety (Shreffler et al., 2012).

Gray and Kung (2012:24) state that SPT present difficulties in diagnosing food allergy in South Africa because the source of the allergen extracts may not represent the local allergens and this can influence the allergy test outcomes. The increase of aeroallergen

sensitivity in the country may lead to false food allergy test results if the Food-specific IgE (sIgE) does not consider environmental allergens or cross-reactivity as one may have grass pollen allergy together with soya allergy, for instance (Gray and Kung, 2012:24). However, it is not always the case that the tests are ineffective, sometimes accurate results may be given which helps individuals to avoid the allergen and live healthily.

Clinicians and patients face challenges in managing allergies because currently there is no cure for this condition. The best approach for dealing with the food that one is allergic to is to identify it, eliminate the food and treat the symptoms when they occur (Colson and Holford, 2012). One should start with the food they suspect the most to be causing the allergy, and by removing it from their diet for few a week or more, they may notice that their health improves and they experience symptoms less frequently. After the recommended period the food can be reintroduced while observing if the body reacts to it (Colson and Holford, 2012:7).

2.4.1 Shortcomings of elimination diet method as cure to food allergies

An elimination diet is a diagnostic procedure that health practitioners recommend food allergic individuals to use with the intention of identifying the offending food(s). Foods are removed from one's diet, starting with the most suspected and re-introduced one at a time (Malterre and Segersten, 2015). During this process one carefully takes note of any allergy symptoms that occur after ingestion till the allergen is picked up (Malterre and Segersten, 2015).

Although individuals may be cautious about what they ingest, other offending food ingredients may be hidden in their meals. Some food production companies have poor labelling practices where all the ingredients are not adequately indicated, for example, in pre-packed food. Colson and Holford (2012:9) note that the ability to accurately read food labels is very poor in many populations, and this is mainly due to the ambiguity and complexity of information shown on a food labels. Research has shown that some food

manufacturers do not inform retailers about changes to ingredients in specific products and are less concerned about the severity of food allergy reactions that the consumers face as a result of poor labelling (DuunGalvin et al., 2006:1340).

Moreover, a study conducted by Cawthorn, Steinman and Hoffman (2013) in South African butcheries and retail outlets shows that 68% of samples tested meat products such as sausages, deli meats and burger patties contained species that were not declared on the product labelling and some of these products were not supposed to be contained in those food products (Cawthorn, Steinman and Hoffman, 2013). The 68% food products contained donkey, water buffalo and goat meat. Undeclared plant matter and soya was also found in these meat products. This breaks the consumer's trust and puts the lives of food allergic individuals at risk because even if the offending food is eliminated, it is possible to still eat it due to mislabelling of food products. It would therefore be advisable for all food products to be labelled accurately to better serve those with food allergies.

The other shortcomings of eliminating allergens is that modifying one's diet can be expensive and lead to ill health if the diet is not balanced. Research done in Australia has shown that patients with food allergies are influenced by their socio-economic status as they try to find the cause of their symptoms. Patients who are wealthier were easily able to change their food choices and consult with specialists in private health care settings where they received various prescriptions and referrals to other doctors, while those who were poor received little medication after waiting for long periods in public hospitals (Mullins, Clark and Camargo, 2000:1530).

2.4.2 Failures of biomedical treatment to food allergies

South Africa has a shortage of resources in the public health system; this includes lack of expertise, testing, or medication for allergies which is a challenge for some individuals to access these facilities. The majority of specialists work in private healthcare sectors, making their expertise, diagnostic tools, and treatments unaffordable and inaccessible to the majority of the population (Nwankwo and Aiyeku, 2002). Minaker et al. (2015) assert that less privileged individuals and those with poor

educational backgrounds may face health care inequalities or difficulties in obtaining medical treatment and managing food allergies due to low-economic status.

DuunGalvin et al. (2006:1339) assert that the management of food allergies can be obtained if the patient-doctor relationship is harmonious. The reason is that there is no cure for this condition and the tests may fail to pick up the allergen. Food allergic individuals are then left with a burden to build their own plan of identifying the cause of the symptoms and to self-manage the condition. A harmonious relationship can lead to better understanding of the chronic condition and lessens stress. In South Africa, research has shown that doctors in public hospitals usually have 7 minutes or less to see a patient during consultation because they are expected to attend many patients (Nwankwo and Aiyeku, 2002:96). This means they do not get detailed information about previous experiences of food allergic patients. Patients change their lifestyle, behaviour and comply with treatment if they have effective communication with medical practitioners.

In addition, most medical doctors are inexperienced in the field of food allergies and may misinterpret the severity of the reaction, which in turn may mean that patients may not report mild reactions and only seek help for severe episodes (DuunGalvin et al., 2006:1339). Therefore, health care systems need to improve their services by adding more resources and educating health practitioners about food allergies. This will help to trace the history of the illness, to find what may have caused its severity. Moreover, it is advisable to refer food allergic patients to dieticians for elimination diets.

2.5 Self-management of chronic condition

Food allergy is a chronic condition that needs consistent management like diabetes or asthma because the doctors cannot address it. Individuals therefore adjust their lifestyles; take control of the problem on their own as they try to avoid continuous reactions. When looking at youths with food allergies, it is essential to find how they self-manage this chronic condition as this is also affected by interpersonal processes (Lansing and Berg, 2014). Families and friends engage in the interaction of health behaviours of young people. For example, when one is experiencing allergy reactions

and taking medication, the care and support of family members and friends may help them to be resilient. In addition, during the elimination diet process and in coping with the condition, the interpersonal sources may take precaution measures to make sure that one is not exposed to the allergen. On the other hand, Eigenmann and Zamora (2002) stipulate that families or peers may be sources of risk especially for peers, for example, they may influence their allergic friends to dine with them and eat offending foods.

2.5.1 Individual's searching for causes of symptoms

People with chronic conditions may choose not to share information about their illness if the symptoms are invisible because studies have shown that individual are discriminated due to the health conditions (Fainzang and Haxaire, 2011). However, food allergy symptoms are often hard to conceal when they appear and this makes individuals to disclose to their kin or friends or to be asked about their health and follow the advice given. Some individuals enquire from other people who had similar experiences or use internet sources to find the causes and cure of specific allergy symptoms. For example, they may ask their family members or Google search what causes an epiglottis to be swollen. Family members may have knowledge or experience on how to deal with the condition using traditional medicine and food health websites provide a lot of information on how to deal with allergies although it is argued that internet diagnosis is notoriously inaccurate (Cline and Haynes, 2001:679).

Individuals prefer to use self-prescribed medications or to consult traditional healers rather than consulting primary health practitioners because the treatment is easily accessible as they spend less time and money (Petzer and Mngqundaniso, 2008). For example, no consultation fee is paid at the pharmacy or when receiving information about non-medical or traditional and popular remedies to use. In addition, information on food allergies are 'cured' in the biomedicine significantly influences the public's knowledge about the causes of allergies and how it should be treated. As a result, some people use self-treatment rather than seeking out medical advice (Gilissen et al., 2006:173). In such instances, it becomes a challenge to clinically confirm if the condition is a food allergy or not. Hadley (2006) states that when people experience adverse

reactions to food they usually relate them to food allergies notwithstanding the fact that they may be caused by unrelated factors. This has been observed in the cases of mild food poisoning although this can be something unrelated and lactose intolerance is often confused with milk allergy (Hadley, 2006).

Moreover, Holland and Jarvis (2007:97) indicate that patients should never try to diagnose food allergies themselves, and should instead seek proper diagnosis from health practitioners in order to acquire appropriate medical treatment. Coulson and Knibb (2007:154) argue that to be sure about what kind of disease one suffers, valuable information should be gathered from a trustworthy source or further study has to be done to verify the information. Booth and Knibb (2000:183) suggest that in cases where self-diagnosis is made, accurate and useful information should be gathered in order to get a latter clinical diagnosis. Coulson and Knibb (2007:153) conclude that individuals who believe in "self-diagnosis and management" issues should be advised to seek medical attention to avoid engaging inappropriate self-treatment or misdiagnosing symptoms.

When people develop allergic reactions they usually know that it is a condition that needs a medical explanation or label. If they do allergy tests and get negative results or are rejected by an allergologist they consult different medical specialists in search for diagnosis and solution. For example, they may do different medical check-ups with a lung specialists, gastroenterologists, stomatologists, and psychologists. In doing this they will be trying to find the cause of the reaction (Fainzang and Haxaire, 2011). The other reason is that individuals will be "seeking permission to be ill" because society does not permit individuals to be anomalously when there is "absence of an "accepted" abnormal pathology or physiology" (Nettleton, 2006:1176).

The medical uncertainties and lack of diagnosis clarity such as unexplained causes of symptoms lead individuals to continue searching for the reason why they developed strange symptoms. Individuals are no longer passive when receiving treatment, instead they are active and some do consider the social determinants of health (Fainzang and Haxaire, 2011). Some may assume that the reactions are due to environmental risk factors such as the change of place or weather while others may suspect the condition

to be genetic if a family member has once experienced similar reaction(s) (Bengt, 2005). Although there is a strong relation between immunoglobulin E and suspected genetic food allergy, no scientific recommended measures have been given to prevent this (Bengt, 2005).

The health seeking behaviours of individuals may be also influenced by their sex and gender. DuunGalvin et al. (2006:1335) stipulate that the health and illness experiences and perceptions of males and females differ because of variables such as biological vulnerability, exposure to health risk, evaluation of risk, perception of symptoms, information processing and role expectation. Sex and gender determines the experience of food allergies and this varies according to individual's lifespan, beliefs and social contexts. Food allergies are more harmful to the emotional wellbeing of women compared to men (DuunGalvin et al., 2006:1339). There could be indications for the prevention, diagnosis and treatment of food allergies found by paying attention to the effects of sex and gender. Very few women with food allergies diagnose themselves when compared to men (DuunGalvin et al., 2006:1339). Therefore gender was considered as one of the themes in this study because I was interested to find if societal roles and gender expectations influenced the food allergy experience or the health seeking behaviours.

Individual's culture influences health behaviour and diseases interpretations. Culture refers to shared societal beliefs, ideas, values and behaviours in the everyday life (Goody and Drago, 2010). South Africa is a multicultural society; people come from different ethnic groups and there is a large influx of immigrants. Consequently, there is a diversity of cultural and religious beliefs which influences the way they interpret diseases and what treatment should be taken and this may lead to misconceptions of therapeutic effectiveness of the primary health care system. Hershock, Stepaniants and Ames (2003:343) argues that in African communities when one is suffering from food-related issues, it is considered as a manifestation of many factors, and this is therefore a challenge to those experiencing the illness. Patients may ask themselves *why* they are affected by the condition rather than *how* it can be occurred. A community might believe that the patient has sinned against God and needs to confess or has been

bewitched or attacked by evil spirits hence needs to be spiritually healed by a traditional healer or prophet (Hundt et al., 2002:443). It is therefore of great importance to considering individual's cultural background and the beliefs of patients during diagnosis in order to provide effective treatment.

The cultural assumptions about diseases and illness affect the relationship between the medical practitioner and the patients. This has led the South African primary health system to implement initiatives to integrate indigenous healers in order to understand how the patients perceive and define disease from a cultural perspective (Goody and Drago, 2010). Considerations of cultural beliefs when diagnosing the patients and their families strengthens and gives hope to the sick and their families because illness may cause them to feel vulnerable and think that the next phase is to die but this strength varies from patient to patient (Goody and Drago, 2010). Hundt, Stuttaford and Ngoma (2002:443) point out that some patients with chronic diseases believe that symptoms are both a physical and spiritual problem resulting in plural healing, using both clinical and social diagnostics processes.

2.6 The use of complementary health care systems

The failure of biomedicine to successful provide treatment for the food allergies, and often lack of clarity on what is the offending food cause people to resort to other healings systems, that may be used alternatively or complementarily to the biomedical system. The other health care systems that can be used include consulting herbalists, prophets and traditional healers.

WHO defines "traditional medicine (TM) as including diverse health practices, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness" (WHO,2002:1). The traditional medicine systems include Indian ayarveda, Arabic unani, traditional Chinese medicine and different forms of indigenous medicine and its therapies involve the medication therapies (such as animal parts, minerals and herbal

medicine) and non-medication therapies (for example spiritual therapies) (Peltzer, 2009).

In South Africa the Traditional Health Practitioners Act classifies traditional healers as: Herbalists (izinyanga/amaxhwele), Diviners (izangoma/Amagqirha), Traditional surgeons (ingcibi), Traditional birth attendants (ababelethisi/abazalisi) and Prophets/faith healers (abaprofeti/abathandazeli), (Gqaleni, Moodley, Kruger, Ntuli and McLeod, 2007). In Africa, 80% of the population are said to be using traditional medicine and in South Africa particularly, about 70 to 80% of people consult traditional healers (Peltzer, 2009). These individuals are said to depend heavily on traditional medicine as they believe that it helps them to meet their health care needs. Mbatha, Street, Ngcobo and Gqaleni (2012) based on their study of 'Sick Certificates Issued by South African Traditional Health Practitioners' point that distance is not a problem for patients. Some travel far and wide in search of indigenous healing because the medical system does not cater to all their needs and they consult medical practitioners later when they no longer have symptoms.

This explains the reason why there is a complementary health care system in South Africa; a "holistic" approach that treats individual's spiritual and physical well-being although the biomedicine has remained with more privileges. The primary health care system is believed to diagnose food allergies better than the other alternative health care sectors. The collaboration of primary health care systems and indigenous healers has led institutions such as the University of Pretoria to accept sick notes that are issued by registered traditional health practitioners. However, most institutions still do not tolerate this which makes it a challenge for the sick as they sometimes go on unpaid leave (Mbatha et al., 2012).

2.7 Coping with food allergies

Most people rely on biomedicine for food allergy treatment, although administration of the medication is self-monitored. Some individuals wish to continue eating the food that they are allergic to, for example, some people take allergex pills soon after eating the food, and a study conducted in South Africa shows that some individuals who are

allergic to seafood take antihistamine before eating (Jedrychowski and Wichers, 2009). This is done to prevent allergy reactions; however, medical practitioners indicate this as a dangerous practice that food allergic individuals should be warned about (Jedrychowski and Wichers, 2009:237). Medical practitioners should advise food allergic individuals to be open and disclose all symptoms when consulting in order to receive appropriate and sufficient medication and only use it where necessary in order to live healthily.

Coulson and Knibb (2007:153) state that food allergies compromise the quality of life of family members, partners, friends and colleagues, as well as the person with the allergy. Being food sensitive reduces the joy of eating as one may fear becoming sick (Shreffler et al., 2012). The impact of this condition on broader social life means that the person at the centre of the experience needs to live in a supportive environment to cope more easily. This is one reason why some food allergic patients engage in religious practices like prayers which gives them hope that they will heal. Some connect and participate in forums and communications on food allergy websites. For example, if the patient felt isolated and was asking questions such as "why me and at this time", or when the family and friends gave little support, online social support could be seen to reduce this isolation, and the associated feelings of stigma and shame, as they were able to connect with people with same experiences (Gilissen et al., 2006:173). For example, group members value the environment for being a non-judgmental space that provides diverse ideas, opinions, swapping receipts, and can make recommendations of relevant publications, books and websites.

2.8 Young people with food allergies and risk-taking

The health seeking behaviours of patients with food allergies is influenced by the individual's age. Gilissen et al. (2006:173) stipulate that adolescents and young adults have more severe allergy reactions than any other age groups because they ignore advice given about food avoidance and have "risk-taking behaviour". Cultural groups attach differing significance to food, how they prepare it, the timing and frequency, who to eat the meal with and where. In the study I looked at young adults, a population that is transitioning into adulthood and are shifting their social identity; at this stage some

may be influenced on what to eat, the pressure may cause them take risks as they assert themselves as "adults". DuunGalvin et al. (2006:1339) supports the notion that young adults are more at risk because they frequently eat away from home, do not admit that they have allergy problems when dining out with friends, and may fail to control what they eat due to peer pressure and alcohol consumption.

Young people like socialising, sharing meals and attending functions where food may be served. For example, universities always hold seminars, debates about current issues and people network in these gatherings during breaks while eating the provided food. This becomes a challenge to food allergic students as contaminations or inhaling the offending food causes ill-health, hence such occasions may be avoided. Gilissen, Wichers and Savelkoul (2006:173) support the view that the dietary restrictions may cause one not to attend social functions and activities, such as dining out. Psychological theories and health belief models show that if one feels vulnerable to a disease that has severe personal health consequences, the more likely they are to take positive measures to avoid aggravation of the illness and its consequences (DuunGalvin et al., 2006:1340).

2.9 Conceptual framework

Sociology of diagnosis was used in the conceptual framework.

2.9.1 Sociology of diagnosis as an approach

Sociology of diagnosis was used as an approach in this study. McGann and Huston (2011) name Phil Brown (1990, 1995, 1987) as the only sociologist who has made an explicit call for the sociology of diagnosis. Brown argues that it is crucial to understand diagnosis in medical sociology because it betters our understanding of diseases, illness, health and the forces that influence our knowledge and practices. Sociology of diagnosis examines "the full array of sites in which diagnosis is practiced, from the examining room to the court room, to the laboratory, to radiology departments – to which we now must add cyberspace" (McGann and Huston, 2011: xxiv).

This approach is significant in this study because previously medical diagnosis was a private matter whereby physicians only relied on body symptoms to; identify the illness, do treatment plans, predict and access possible outcomes and provide an explanatory framework (McGann and Huston, 2011). Moreover, less attention was given to the patient's narratives and lay health beliefs. In this 21st century, diagnosis and treatment has been taken away from the medical examination room and contested publicly by patients, families and communities and this influences the health seeking behaviours of individuals (Conrad, Bandini and Vasquez, 2016). Conrad et al. (2016:23) argue that internet has 'revolutionized the interactive experience of illness'. This means diagnosis via the internet permits individuals to search for medical information, share their experiences and suggest possible solutions without engaging the physicians (Conrad et al., 2016:23).

Brown (1990) argues that diagnosis is an 'arena of struggle' that the sociology of diagnosis explores (McGann and Huston, 2011:402). This is evident today because some individuals such as indigenous healers challenge medical diagnosis and declare certain diseases and illnesses such as food allergies to be 'cultural illnesses' and to be only treated spiritually. The sociology of diagnosis was therefore seen as an important lens in this study because it includes actors who are involved in diagnosing illness outside the medical examination room (McGann and Huston, 2011).

The medical diagnosis of individuals has been identified as an event with social roots and consequences. For example, those who are deviant in the society may be medically diagnosed as mentally ill and consequently the community may use the diagnosis to personally identify such individuals by labelling them as "ill", "mad" or stigmatise and discriminate them (Conrad and Schneider, 2010). Similarly, food allergic individuals may avoid attending social gatherings that involve food in trying to maintain a healthy life but such behaviours may be referred to as social isolation or being "fussy". To be diagnosed as food allergic also has social impact such as discrimination. For example, some teachers used to exclude food allergic students from school outings or trips (Alvarez, 2013).

Sociology of diagnosis therefore served as the lens of this study because it was my interest to look at diagnosis of food in the medical setting and how it is linked to social construction of this condition, and how the social-cultural constructions regulate the searching for remedies.

2.10 Conclusion

In this chapter, I reviewed literature that supports the nature of this study; discussed the food allergies, what causes them and how they are treated in the biomedicine. Moreover, I discussed the socio-cultural factors that influence health seeking behaviours and how this condition is treated outside the biomedicine. I further explored sociology of diagnosis as a concept; the importance of health practitioners to understanding how food allergies are defined and diagnosed by individuals in their social context before or after consulting at the primary health care system.

In the next chapter, I discuss how this study was conducted, illustrating the data collection methods and analysis.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter looks at the methodological design of this research, the methods and the data collection techniques that were used in this study and justifications for selecting these methods. I will discuss qualitative paradigm and auto-ethnography as a method used to collect data together with semi-structured, open-ended interviews. I present the sampling technique using the snowballing and convenience methods. Eleven participants were selected, 7 female African students, 1 female white student, 1 female coloured student and 2 African male students at the University of the Witwatersrand in Johannesburg, South Africa. The chapter also discusses the successes and challenges that I encountered using the stated data collection methods. This chapter further looks at the analysis plan and includes a reflection on reflexivity which allowed me to deal with my personal experiences and the ethical considerations that I adhered to.

3.2 Research design

Qualitative research was identified as an appropriate method and used to collect data among individuals who had experienced a health condition such as food allergies. This method was deemed suitable in understand their health seeking behaviour experiences, how the condition was affected by their social lives, and how community members defined or reacted towards the illness (Groleau, Young and Kirmayer, 2006:672). This approach was appropriate for the study because as Hiatt (1986:54) indicates, qualitative research method allows the researcher to discover and understand the experiences, thoughts and perspectives of respondents and draw them together in a comprehensive perspective that accounts for many aspects of the experiences being described.

Under the category of qualitative research there are many methodological approaches and methods that fall under it, for example the participatory enquiry, participant observation, case study, visual method and interviewing. Among these methods I chose interviewing because of its advantages as it "can provide important insights and knowledge" (Nelson et al., 1992:2 cited Denzin, 2008:9). A semi-structure, open-ended

interview method is a flexible method; it permitted me to have a close contact with the respondents, generated data in a flexible and sensitive way. This method was useful because the list of questions served as an interview guide rather than as a guide that needed to follow them in a particular order.

In this study, I also applied the auto-ethnography method. This method is defined as "an intriguing and promising qualitative method that offers a way of giving voice to personal experience for the purpose of extending sociological understanding" (Wall, 2008:38). I shared my personal experience with the respondents, which assisted them in reflecting how social structures and beliefs influenced my health seeking behaviours as I was trying to find what my body was reacting to. I gave the participants option to choose what they preferred either to allow me to narrate my story before engaging with them or after the interview but some preferred the story to be sent as audio via WhatsApp and listen later because they had busy schedules. Fortunately, all of them commented on how our experiences were similar and found it fascinating. Giving them this choice was a technique to avoid "being too self-indulgent and narcissistic" because mostly auto-ethnography method is criticised for its strong emphasis on self or for being individualised (Holt, 2003:19). Moreover, sharing our similar experiences helped to overcome the distance between us, they became at ease or in the same level with the researcher and openly reflected and shared their experiences of the social world.

Auto-ethnography helped me to challenge the views about silent authorship or that researcher's voices are not included in the presentation of findings (Charmaz and Mitchell, 1997 cited in Holt, 2003:19). Writing about food allergies from personal experience helped me to better understand the experiences of the food allergic youths because we had more or less similar challenges or experiences. For example, it took me almost 2 years to find what I am allergic to but some participants identified the allergen within a period of two weeks. On the other hand, we all used the food elimination method as one of the methods of finding the allergen. Auto-ethnography research is preferable because researchers engage in topics that they have experienced and interested in. Using both, interviews and my personal experiences permitted the voices of the participants to be heard. Ellis et al. (2011:276) support that

although auto-ethnography is used, it is essential to interview some individuals with similar experiences in order to analyse different experiences, thus comparing and contrasting the existing literature and personal experiences. This method of sharing our experiences strengthened the quality of data collected and avoided to capture data from one single perspective.

The analysis of the data attended to the qualitative nature of the research. The emerging themes were put into categories like for instance how many participants consulted primary healthcare and how many used alternative healthcare systems for their condition. The data collected was analysed by identifying the emergent categories and theories because I did not have pre-exiting ideas or categories (Corbin and Strauss, 2015). The analysis of the qualitative data consisted in the examining each interview, which was valued, captured and put as distinct information or categorise into groups if the experiences shared were similar with that of other participants. The approach of sociology of diagnosis assisted in coding data as well as in interpreting the meaning presented by each interviewee. In doing so, I easily understood their beliefs, values, attitudes or their perspectives of their health experiences.

3.3 Participants

A food allergic individual is one whose immune system responds abnormally to certain food that is suspected to be harmful (Ahn, 2011). Although often there is uncertainty on which foods is causing the allergic reaction, the reaction can occur within minutes or several hours of exposure (Bengt, 2005). The symptoms may include irritation or itchiness, swelling of epiglottis, hands or tongue, shortness of breath and diarrhoea and these may be severe or mild (Ahn, 2011). To find if one has food allergies, the allergic tests may be done or one can discover by eating or drinking the allergen, experience allergy symptoms afterwards and may confirm with a health practitioner. Diagnosis of food allergies is a challenge because the allergy tests are not the only tests to qualify that one has food allergies. Moreover, the allergy tests may be inaccurate, fail to pick up the allergen and some people may not afford to do the allergy tests (Shreffler et al., 2012). The best method advised by physicians and WHO is, to fed an individual with the allergen and observe if they experience allergy reactions. Therefore, in order for one to

be said they are allergic to certain food, their immune system should respond abnormally when they ingest, contact or inhaling certain food, leading to signs and symptoms of allergy.

The focus of this study was the health seeking behaviours of young adults with food allergies. Coleman (2005) stipulates that a population study refers to a total numbers of people who have certain characteristics that the researcher is interested in. Eligible participants were therefore selected based on the following criteria (i) have experienced food allergy and consulted a health care system(s) concerning the illness because it was my interest to find the social and cultural experiences caused by the illness and why specific health care system(s) were chosen. The other criteria was, the participants were to (ii) be aged between 18 and 35 years old and enrolled at Wits University. The reasons for these selection standards are discussed below.

Young adults were selected to participate in this research because studies show that young people with life-threatening food allergies may take risks as they try to fit into their peer groups. For example, they may eat together with their peers and ignore the food labels or food ingredients used in the meal preparation and some may enter into precarious public environments such as restaurants without epinephrine injection or allergy medication (Growland, 2001 cited in Dean et al., 2015). At this stage of life some youths may be affected by the consequences of social exclusion or stigmatisation as they are at a socially and psychologically formative age (Papalia, Olds, Feldman and Kruk, 2004 cited in Dean et al., 2015).

During the interviews, it came up that food allergies were handled differently and this was influenced by individuals' socio-economic status. For example; those that worked part-time, were able to pay for their medical bills while some indicated that in order to prepare a meal, they only afforded canned foods that they were allergic to. Individual's socio-economic status may deter individuals from engaging in costly health seeking behaviours.

The required results were acquired from enrolled Wits students and the sample for this study was 11 individuals which composed of 9 females and 2 males from different ethnic and racial groups. The table below presents the profile of the participants.

Fig. 1

Name of Participant (Pseudonyms)	**Sex F-female M-male**	**Age**	**Race**	**Field of Study**	**Year of Study**	**Part-time job ✓ Yes X No**
Kayley	F	22	African	Honours degree in Sociology	1st	X
Onesimo	F	24	African	Bachelors of Laws (LLB)	2nd	X
Naledi	F	23	African	Bachelor degree in Education	2nd	✓
Nozy	F	24	African	LLB	3rd	X
Tinotenda	F	20	African	Bachelor degree in Education	2nd	X
Sihle	F	23	African	LLB	4th	✓
Cara	F	21	African	Bachelor of Science in Computer Science	2nd	✓
Thembinkosi	M	27	African	Bachelor of Science in Engineering	4th	✓
Sean	M	33	African	PhD Studies in Sociology	2nd	✓
Kyra	F	24	White	Masters of Arts	1st	✓

Asande	F	27	Coloured	Masters of Arts	1st	✓

Other demographic characteristics of the participants like their ethnicity[1], religion, place of residence, what they are allergic to and which health care system they consulted will be discussed in the findings and analysis chapter. Below is a section of this chapter that discusses how the food allergic individuals were located to participate in this study using a sampling method.

3.4 Sampling technique

Snowball sampling and convenience sampling methods were used to draw people with food allergies into the research. Black (2009:226) defines snowball sampling as a technique where respondents are selected based on referral by other research participants. I had already identified two students who were suitable for the study from my department; these individuals stayed at West-campus village of Wits residence and receive meals in the same dining hall. These individuals had to share with me names and contacts of others with food allergies and those also referred me to other participants. One participant referred me to Men's residence where one participant was found and also referred me to others who were eligible for this research but staying off campus. Neuman (2003) stipulate that a researcher can locate other participants by asking individuals who have knowledge about the topic to help and locate others who can provide the needed information. The advantage of using snowball sampling method is that referrals help the respondents to be identified easily and efficiently (Black, 2009:226).

The research was conducted in Braamfontein with food allergic young adults who were enrolled at Witwatersrand University. The number of respondents was determined by "the point of saturation"; the interview procedure continued until new themes emerged (Bowen, 2008). Witwatersrand University is a study area that was chosen using a convenience sampling. McCormack and Hill (1997:55) assert that this method makes

[1] In this study participants where from different races, there were 9 Africans, 1 white and 1 coloured. During the interviews participants were asked to indicate their race under biographical information because Wits has diverse student learners.

the research process more manageable as, in this case, Wits was my immediate social environment so this reduced costs such as transport. In convenience sampling the part of the population is readily available; in this instance I am referring to young adults (McCormack and Hill, 1997:55). Below I discuss how I collected data for this study.

3.5 Data collection method

Semi-structured, open-ended questions were used in interviews as this method allowed me to explore the topic of interest and clarify unclear questions, thus interacting openly with the participants (Rubin and Babbie, 2009:94). Semi-structured, open-ended interviews also permitted me to probe further about the health seeking behaviours that the respondents experienced and reasons for consulting specific healing systems. Issues that require further clarification were investigated through the use of repeat interviews. The advantages of using this method of research are that, it provides much more scope for the participants to express their feelings and thoughts which was useful for generating new findings (Alston and Bowles, 2003:104). As Ackroyd and Hughes (1981) explain, data collected in interviews about what the respondent says about herself or himself potentially offers the social researcher access to vast storehouses of information.

Moreover, to find the social and cultural factors that influence health seeking behaviours is a sensitive topic. It may involve the behaviour, rituals or religious practices of the participants that they would not like the public to know. Hence, semi-structured, open-ended interviews gave room for privacy and peace as the interview included me and the participant without being influenced by others. Sparkes (2000) supports that It is important to be reflective, reflexive and sensitive to the health needs when conducting a research with people who live with illness or chronic conditions and if the researcher also shares similar experiences.

Auto-ethnography was also used as a research method. I considered my feelings about the knowledge of the topic discussed (Ellis, Adams and Bochner, 2011), in this case, how the social interpretations of the food allergies influenced my health seeking behaviours. The personal experiences helped to guide the interview, posing questions

and in putting myself in the position of the interviewee. Moreover, this approach permitted me to share the emotional responses to the interviews that were conducted. Ellis (2004:18) states "even though the researcher's experience isn't the main focus, personal reflection adds context and layers to the story being told about participants".

Ten interviews were conducted at Wits Braamfontein campus in the sociology rooms and 1 was done via Skype video call as the respondent had completed her Honours degree and only coming to Johannesburg in July after the submission of this research project. Interviewing the participant via video was a bit disturbing because the respondent paused the interview 3 times attending to people at her door and coming back after 15 minutes or so. Although this was disruptive or caused the interview to take longer than expected, the participant provided me with information that I was looking for.

The participants chose their own appointment day and time or when they were available for interview and I provided them the sociology room number where the interviews were to be conducted. These rooms were preferable because there was peace, privacy and easily accessible to students who are conducting research interviews. All the issues regarding the research were formal and explained verbally. The respondents signed consent forms before and after the interview as approval of participation. The one for video interview sent the signed consent forms via email. During the interviews I took notes and used an audio recorder. Although these are essential data collecting tools in qualitative research, I only used these tools after they agreed (Wang and Geale, 2015).

All the interviews were conducted in English language. Although some respondents used a bit of Xhosa, Zulu and Ndebele language to express themselves, I understood them because, my first language is Ndebele which is more or less the same with the other two. Each interview lasted for about 40 – 45 minutes except the one conducted via Skype which took 1 hour 25 minutes. I later transcribed the recorded interviews and the collected data was analysed using thematic analysis as discussed below.

3.6 Data analysis strategy

Data analysis is a process where a researcher breaks down large volume of textual material, study its contexts and make sense of the data, collect and organise it (David

and Sutton, 2011:333; Lacey and Luff, 2001). The ideas, actions and experiences of the participants were collected and presented in their original state and analysed using thematic analysis. This strategy is suitable for analysing a qualitative research (Marks and Yardley, 2004).

Thematic analysis involves transcribing the information from the audio into readable texts and it took me approximately 3 hours to transcribe each interview. The views of the participants were captured verbatim. The data was then grouped into themes in a way that speaks to issues such as similarities of food allergy experiences. For example, what influenced health seeking behaviours of the participants, how food allergies were socially or culturally defined before and after diagnosis, what influenced them to use specific remedies or health care systems and self-management of food allergies. A single interview provided different themes and similar issues raised by participants were identified, grouped in order and put into themes. This explains the reason why thematic analysis was preferred.

The transcriptions were read several times so as to try and capture meaningful information, and to compare and contrast viewpoints, thereby grouping data into themes. It was challenging to put data into themes because it is not only a matter of summarising the provided information but show how the information answers the research question, support an analysis that will not only be understood by the researcher but for the readers to make sense of it (Marks and Yardley, 2004). Every research dealing with human beings is bound by ethical practice and the following sub-heading grapples with this aspect.

3.7 Ethical considerations

This study was granted approval by the Ethics Committee at the University of the Witwatersrand. Informed consent was sought from the participants before conducting the interviews. Participants were assured that the study was not going to cause any harm and that data collected was going to be kept confidential and only provided to those who are involved in the study, such as the supervisors. Participants were notified that the study was only conducted for academic reasons and that there are no physical

benefits and monetary compensation for their participation. I explained that the purpose of the study was to find out about their experiences on health seeking behaviours as individuals with food allergies, the social and cultural challenges faced and why they chose to consult in specific health care systems. In terms of anonymity, they were given a choice to use pseudonyms of their choice, in order to protect their confidentiality and to be able to identify themselves clearly in the final research report.

The respondents were given an option to stop the interview if they felt uncomfortable. Neuman (2000:76) argues that before and during research interviews the respondent should be given an opportunity to state if they are interested in participating and should not face any psychological, physical or legal harm during or after the study. Moreover, narrating a chronic illness experience and how it is socially or culturally interpreted can be emotional, and may lead the interviewer to an ethical dilemma (Wang and Geale, 2015).

In cases where the participants expressed emotions related to sadness when sharing their experiences, I gave them an option to stop the interview, take a break or get an emotional support from Wits Counselling and Careers Development unit (CCDU). For example, one respondent expressed sadness while explaining how allergy reactions stressed her and that at times she cries together with her mother and comfort each other. However, the respondent requested that the interview should not be stopped because; she can handle the situation as compared to the past. Some participants indicated that they cannot provide detailed information about their experiences as they sought help. One indicated that she cannot explain in detail what was said during prophecy because; I would only understand if I was in the spiritual world. As a researcher, I respected the right of the participants by not asking for clarity of what they meant but moved to the next question.

I provided the participants the contacts of my supervisor Prof. Lorena Nunez to report any unethical issues that could have occurred during the interview or if they contemplated withdrawing from the study.

3.8 Reflexivity

Reflexivity in research refers to the biases that the researcher may have, possibly brought into her project hence a need to acknowledge and examine how my feelings, motives and reactions influenced this study (Berger, 2015).

The fact that I shared my personal experiences of food allergies with the respondents this had an impact in this study. During the interview, one participant said I knew that in social gatherings people eat offending food and that I can share my own experiences with him. In such cases, I kept quiet and let them continue sharing their experiences. In doing so; I was avoiding being the one speaking rather than hearing their experiences.

Having a food allergy experiences and Christianity beliefs, I had to be reflective on the fact that I understood what the Christian respondents were saying. For example, some indicated that they engaged in prayers and used anointed materials that helped them to reduce pain and stress. Nevertheless, I had to probe further or put aside my experiences and remained neutral to allow participants' narratives to come to the fore (Hawtin and Percy-Smit, 2007:146). For example, I asked them give examples of what they did or used and how church members defined the allergy. This stance was helpful because, some participants began to reveal how they thought their conditions were linked to evil spirits and why God caused them to experience such a health condition.

Reflexivity was an integral part of auto-ethnography as I had to always place myself in the experiences being narrated, as similar or different to the one the interviewees were describing. For reflexivity to be ensured in the study, I recorded and captured the responses given by the participants as they were given. Although I shared my personal experiences with them, I had to ensure trustworthiness throughout the interviews. I made sure that I did not influence them as they shared their experiences and I had to take a similar stance when I was analysing and presenting the findings of this study.

3.9 Limitations of the study

Interviews may have some demerits as Haralambos and Hilbourn (1999) note. The problem with interviews is that they can provide information that may be neither valid

nor reliable. Moreover, the interviews may have many of the drawbacks such as responses not accurately given and may not reflect the real behaviours. Respondents may lie or forget some of their experiences.

This study involved a small sample, hence the provided information cannot be generalised or represent experiences of all young people with food allergies. However, for the purpose of this research, the respondents yielded insightful information as the objective was to find out about their own experiences and this has provided an understanding of what some young adults might be experiencing.

Using semi-structured, open-ended interviews might have caused biases as some respondents chose not to share their full experiences about how social and cultural factors influenced their health seeking behaviours. The use of snowball sampling method might have influenced the respondents to possibly discuss about the research interview questions or nature of the study. For example, one respondent was given my contact details by her colleague and indicated that, she has been told about the research topic and interested in participating in the study. Regardless of these limitations, it was important to conduct this study as participants made a contribution to understand how different cultural groups interpret food allergies and how this has an impact on the health seeking behaviours of individuals.

I also acknowledge that my personal experiences might have influenced this study as I discussed earlier in the reflexivity section. I also took steps to notice where my narrative matched theirs or diverged from it.

3.10 Conclusion

The chapter discussed the research methodology that I used to collect data for this study. I used a qualitative research and the methods include semi-structured, open-ended interviews and auto-ethnography. These methods were effective to capture the views of the participants and to understand what influenced their health seeking behaviours. In doing so, I was answering the research question and sub-questions. Sharing personal experiences with the participants helped the participants to be at ease, thereby enhancing them to give detailed information. I acknowledge that my

experiences might have influenced the data collection and analysis and I adhered to ethical procedures. The chapter also explained how thematic analysis was used to analyse data and discussed limitation of the study. In the next chapter, I present the findings and analysis of data collected where I respond to the research question and sub-questions of the study.

CHAPTER 4: FINDINGS AND ANALYSIS

4.1 Introduction

This chapter reports the results and provides detailed analysis of data that was gathered. During thematic analysis, I identified different themes from the responses of participants. In discussing the findings, I used direct quotations of the participants to strengthen and support the themes. In discussing and analysing data I attempted to answer the research question, "What are the health seeking behaviours of university students, women and men (18-35 years old) with food allergies?" This includes the sub-questions, (i) What are the social and cultural factors that influence people's behaviours in seeking treatment when they start noticing allergy symptoms? (ii) Why do food allergic individuals choose specific healing systems or treatment measures? The themes and subthemes of this research are used to outline this chapter and these are:

(a) Theme 1: The first stages of food allergies and the reaction of the social environment

(b) Theme 2: Biomedicine as a primary health care

Sub-theme 1: Biomedicine has no cure for food allergies, leaving the affected individuals with no answer

(c) Theme 3: Socioeconomic status influence health seeking behaviours

(d) Theme 4: Finding the allergen; changing the diet, the environment and asking for spiritual intervention

Sub-theme 1: Misinformation and mislabelling of food products challenges the elimination diet method

(e) Theme 5: (Mis)interpretations of food allergies

(f) Theme 6: Gender differences in health seeking

(g) Theme 7: Food allergies and impact on social relationships

Sub-theme 1: Young people with food allergies and risk-taking behaviours

Sub-theme 2: Self-management of food allergies

Sub-theme 3: Diverse ways of coping with food allergies

In the appendix there are summaries of respondents' biographical information that will be used in the discussion. In **Fig. 2** (in the appendix) I stated their names, sex, age, what they are studying at Wits University, their level of study, and if they have part-time jobs. In the appendix I provided information that explains where each participant originated from, who they stay with in Johannesburg, the types of jobs they do and when they developed food allergies. During interviews, I asked the participants these questions to find if gender, age and socioeconomic status had influence in their health seeking behaviours.

The similarity among the respondents is that they all experience un-concealed symptoms, itches or irritation and an unpleasant feeling during their reaction. Other similar experiences or challenges include diagnosis stage or identifying the problematic food, adaptation after diagnosis and living with the food allergy as young people. However, their health seeking behaviours had to differ according to one's socio-economic status, cultural beliefs, practices and gender.

Fig. 2 illustrates the different health systems used by food allergic participants, 45.5% used the private hospital, 45.5% used the public health system and 9.1% used both private and public system. The participants indicated that the minimum consultation fee for private allergy specialist (GPs) ranges from R1 200 – R1 500 in South Africa including the allergy tests. On the contrary, those who consulted the public health care systems consulted for "free" of charge but experienced shortage of resources such as allergy tests. The alternative health care systems and self-diagnosis methods and treatments were also used. For example, they used anointed materials from faith-based healing systems, natural herbs from herbalists, traditional herbal remedies that they took from others who consulted an African traditional healer while some prayed on their own.

4.2 Themes

Below are themes that emerged from the data collected.

4.3 The first stages of food allergies and the reaction of the social environment

Health sociology emphasises the influence of the immediate environment because families, peers and ethnic communities influence how individuals interpret health related issues, the causes, manifestations of illness and how to express pain (Gilbert, Selikow and Walker, 2009). In trying to understand the reasons for choosing specific health systems or certain remedies, I found that food allergic participants disclosed the symptoms and received advised from their kin or friends. The advice provided influenced their choice of treatment methods and health system. The choice and acceptability of a health care system by individuals is socially embedded and shaped by experiences of family members, friends and media (Harris, Goudge, Ataguba, McIntyre, Nxumalo, Jikwana and Chersich, 2011:118).

Food allergic participants' responses on how they initially sought help for allergy reactions

> "Yah, I definitely disclosed especially with the Brazil nuts because....my family knows everything....I always got tonsils and stuff and my family and I have developed this habit that whenever you eat pork you drink anti-biotic, it has always become a routine like" (Kayley).

> "Yes, they (the family) just said its tinned food when I told them because my brother had a similar experience.... at first uLihle (brother) told me to put brake fluid[2].... I began to be worried and suspected the tinned food as my brother has it.....I also went to the doctor who said it was a fungal infection caused by tinned food" (Sihle).

[2] A brake fluid is a liquid used in a hydraulic brake system and individuals attempt to use it to cure their skin conditions and fungal infection.

In the literature I discussed that, the initial step that individuals take when seeking interpretations of illness symptoms is to consult people who are close such as kin and friends. In cases were family members had similar symptoms or illness experience; they often recommend a healing method or system that they used to recover. During the interviews, Kayley stated that she disclosed the allergy reactions to her family and took self-medications because all of them are allergic to pork and often drink anti-biotic soon after eating in order to reduce the pain from tonsils. On the day when she developed eczema with bruise, all family members had eaten pork chops but she alone had the reactions. On a different day, they ate Brazil nuts and again she alone experienced the swelling of the tongue, itchy and body rash. Kayley and her family suspected that the symptoms were caused by food allergy reactions; on those different days, they home-diagnosed the symptoms and she used their "daily routine" treatment - anti-biotic and allergex pills that they bought from the pharmacy. Kayley tried to eat these types of food separately in different days repeatedly and she reacted. That is how they confirmed that indeed those where offending foods that were threatening her health. Kayley's initial behaviours in seeking health was influenced by her immediate environment; her family's knowledge and experiences on what may cause body reactions and their "cultural" practices of diagnosing and treating themselves.

Sihle's story is comparable to that of Kayley as she applied brake fluid that his brother used to treat himself when he had skin irritation and patches like fungal infection on his arms. Lihle had these body reactions when he ate tinned food and the brake fluid helped him to clear all the patches. Lihle suspected that Sihle had a similar health condition since their symptoms were the same, the difference being that Sihle was only affected at the back. Sihle used the same substance to treat her back; however, this was not effective because it left her with "permanent" black spots and the reactions continued to spread to other parts of the body such as neck and hands. The ineffectiveness of the remedy caused Sihle and her mother to consult a doctor and the allergy tests results confirmed that indeed the reactions were caused by tinned food. The physician prescribed Sihle effective medications to clear the fungus infections and the black spots. In the literature, I discussed that there is a pattern on the health-seeking

process of individuals; close family friends are involved more in the decision-making process regarding health issues. Families encourage the sick to use folk remedies or go to community for help before seeking Western health care. The sick usually follow these advices because they will be from people whom they trust in their social unit and who might have had similar experiences about the illness (Goody and Drago, 2010:49). This explains the reason why it is important for health care practitioners 'to consider the social environment of family, friends and culture within which the client' with food allergies operates (Goody and Drago, 2010:48).

Similarly, when Onesimo experienced the peeling of skin on the neck, stomach and itching skin her friend recommended epiderm cream to apply on her skin. Onesimo's friend used epiderm when she had skin infection and thought it might also work for her friend. However, Onesimo's case was different; the reactions were caused by food allergy hence it became worse as she was eating fish, her offending food. The severity of the symptoms and failure to get effective treatment caused Onesimo and her mother to consult a doctor who picked the allergen using food allergy tests.

When analysing the three stories, there is a need for individuals to consult health care practitioners when experiencing body reactions or symptoms rather than relying on lay interpretation. Having the same medication does not mean that people can use the same treatment. This is risky and worsens one's condition especially if one continues to ingest or inhale the allergen. Medical practitioners have a duty to listen and understand a patient's narratives before treating them because, diagnoses and treatment of food allergies may occur outside medical examinations. In addition, patients might have misinterpreted the illness and used remedies that are harmful to their bodies that need to be detoxed.

Cline and Haynes (2001: 679) assert that when family members and friends have knowledge and experiences about certain health conditions or illness symptoms they share information with the sick person or they use health websites information to diagnose and treat themselves. This is evident in this research; some food allergic participants read about the symptoms or followed how people in their families or community seek help for health problems.

To further add weight to the point that food allergic people resort to their immediate environment for help are the narratives below,

> "Yes, I used to tell everyone close....during childhood it was like heat rash then it became worse.... so we used to buy cream for rash....so people just thought it's the rash....parents always said there is something wrong that I eat....I went to the clinic because thus what people do in this community even on TV" (Thembinkosi).

> "Yes. I told my mum, I was at school so I called her....I didn't go to the clinic when I got home she gave me medication....she is a nurse....I had read about the symptoms and found out that there are very dangerous" (Sean).

Socialisation plays a pivotal role in influencing one's choice of health system. A sociological concept of learning looks at the social interaction and behaviours of friends, family and community as significant in explaining behaviours of individuals (Siegel, 2005). Social psychologists developed a social learning theory trying to show how human behaviours are interdependent with behavioural, cognitive and environmental determinates (Siegel, 2005). In the study, the food allergic individuals adopted health related behaviours that they were advised or heard to be effective in their community. Thembinkosi indicated that sick people in his community and on television consulted primary health care system when they have health problems and this influenced his decision. Similarly, Sean read about his symptoms through health websites and found that people consult health care practitioners. They learned from the media that their body symptoms are dangerous and need medical treatment. However, Sean preferred to receive treatment from home because, it is part of his family's culture to be treated by their mother who is a nurse.

Family cultural practices therefore influence health seeking behaviours. In addition, Naledi and Kyra were receiving treatment for allergy reactions from allergy specialists since childhood and they currently prefer to use this system because, that is what they

were taught. The health seeking behaviours such as choices of health care system to use is influenced by individuals' socialisation, their history of illness and how they were previously helped to manage the illness symptoms. Rasheed (2013) argues that health is not just absence of disease, and wellbeing but also influenced by how individuals learn to interact with others.

Individuals consult health care systems or use remedies that their families or friends approve. This means the methods will be trusted and believed to be effective in diagnosing and treating those health conditions. Nozy, Tinotenda and Asande consulted health care sector that their family members recommended for their condition. On the other hand, Tinotenda and Asande's choices of using non-medical remedies such as relying on prophecy to interpret the symptoms or the use of traditional herbs to treat the symptoms was influenced by their beliefs and practices.

4.4 Biomedicine as a primary health care

Most food allergic participants received advice to consult health practitioners for example at the clinic, hospital and pharmacy while some used alternative health care systems or both. This view is strengthened by the fact that only 1 out of 11 participants did not use any medical treatment but relied on prayers. Cottencin, Mullet and Sorum (2006:791) assert that when the illness is serious people prefer to consult physicians. This is evident in this study as some respondents pointed that they had tried other remedies before consulting a nurse, doctor or pharmacist. The severity of pain, continuous allergy reactions and fear of unknown internal body reactions made them to seek help biomedically.

Below are some of my pictures when I had food allergy reactions.

Fig. 3



Food allergic participant's responses on why they consulted health care practitioners

> "I only consulted a doctor because I had eye rashes and they were red so they (parents) took me straight to a doctor" (Naledi).

Food allergic individuals consulted health practitioners to find the causes and the solution of the symptoms that they were experiencing. The biomedical model of health is strictly physical. Hence, it is trusted to have better knowledge and technology that helps to explain the causes of illnesses and to provide specific drugs for treatment. Initially, Asande tried to ignore the allergy symptoms but the severity of the pain led her to consult at the clinic. Moreover, Kayley has three types of food that she is allergic to but only consulted a physician for an eye reaction because to her this symptom was weird as compared to other body reactions. These symptoms frightened the food allergic participants and their families. For example, some of the participants said, "it was kinda like a panic" (Kyra), "weird thing" (Kayley) and "so uncomfortable" (Asande).

Symptom severity accounts as a significant factor that influences consulting behaviours. In the study, Sihle, Onesimo and Thembinkosi tried to self-diagnose and treat the symptoms that had developed on their skin but the symptoms did not cease. Instead, they experienced more reactions that caused them to consult a doctor. For example Sihle said, "when it grew I began to be worried" while Onesimo said, "I saw that there is more to it" and Thembinkosi reported, "it was worse". This shows that health

practitioners are trusted to offer better explanations of what causes certain illness symptoms. In the literature it was also discussed that, individuals first prefer to diagnose themselves or to use "social" remedies before they consult health care practitioners. Petzer and Mngqundaniso (2008) state that individuals do not consult at the primary health care centres because they assume the symptoms to improve over time. Even when individuals know that they have major health problems they avoid consulting in the biomedicine due to limited access to quality health care. This includes financial constraints, 'patient delay' and negative experiences that would have been encountered before (Taber, Leyva and Persoskie, 2015:290). Although biomedicine is a trusted health system, the barriers that individuals face cause them to prefer self-diagnosis and self-treatment. As a result, they would only consult if their own methods fail or if the illness symptoms persist. In this study, the treatment and care expectations that individuals had were not met and none of them found cure for allergies from biomedicine.

4.4.1 Biomedicine has no cure for food allergies, leaving the affected individuals with no answer

Currently biomedicine has no cure for food allergies, the allergy tests are ineffective and this has an impact on the health seeking behaviours of allergic individuals. Research on food allergies shows that, biomedicine's failure to state the causes of the symptoms and to provide cure for allergies causes individuals to be reluctant to consult. Moreover, some food allergic participants indicated that, they no longer adhere to medication such as allergex because they lost hope in the primary health care system. In this study, nonadherence to medication refers to stopping the therapy too soon or number of doses not taken that put in danger the patient's therapeutic outcome (Nichols-English and Poirier, 2000).

Food allergic participants' responses on how the biomedical model failed them

> "I went to the clinic and they just gave me medication but it didn't help. I went there several times till we consulted the doctor who gave me pills and other medication but it didn't help....I did the allergy tests when I was in grade 7 but it didn't show what I was allergic to....the result of me taking medication didn't help because, I got more sick....that's why I stopped taking medication. I also reacted on it...he (the doctor) told me that I didn't eat before taking the medication that's why I reacted but I had eaten and then he said, I should continue taking it till my system gets used to it" (Thembinkosi).

The primary health care system either private or government clinics or hospitals offer no cure for food allergies as reported by food allergic participants. Research also shows that biomedicine has no medication that cures food allergies, which in turn encourages individuals to consult with indigenous healers while seeking help for health (Gray et al., 2015; Hiatt, 1986). This was also evident in the study as some participants indicated that they had to use non-medical treatment when biomedicine failed them. Food allergy tests are unavailable in most consulted public system and this caused many to lose their hope in the system that they believed to be effective in explaining the illness causes and to provide solutions. Failure to receive cure for food allergies caused some to be stressed. For example, Kyra noted that she has depression leading to other forms of disorder that exacerbates her food allergy reactions.

In this study, most disadvantages found in the biomedicine when seeking help include, the failure to access allergy tests and inaccuracy of the allergy tests. For example, only one out of five participants who consulted at the public clinic or hospital did allergy tests. Moreover, the problem of allergy tests is not only its shortage in public health sectors but also its impreciseness both the allergy skin-prick or blood tests. For example, Thembinkosi consulted a private doctor after failing to access allergy tests at a public clinic but the tests never picked up the allergen. In the literature it was discussed that, the medical community contributes to the problem of confusing people with food allergies because food allergy tests such as skin-prick testing (SPT) and blood testing may lack accuracy (Shreffler, Yuan and Asp, 2012). In cases where individuals did not

receive laboratory tests or effective results it became their duty to find the allergen and self-manage the chronic condition.

A physician worsened Thembinkosi's undesirable experiences as he gave unclear explanations of why he was experiencing medication side effects. Regardless of side effects or pain he experienced from medication, the doctor expected him to continue taking the same medication and no medication were prescribed to substitute them. Most surveys with patients show that they normally have poor communication with their doctors. For example, Tongue et al. (2005) reported that only 21% of the patients reported satisfactory communication with physicians, but 75% of the orthopedic surgeons surveyed believed that they communicated satisfactorily with them (Ha and Longnecker, 2010:38).

One reason why Thembinkosi and his doctor had poor communication can be the power relations; the doctor as the one with medical knowledge and skills "discouraged" the patient to request for more reasons why he was reacting to the prescribed medication. Thembinkosi's concerns and expectations were overlooked because patients are objects of interpretations and decisions instead, health practitioners decide either to give them medication or not (Fassin, 1998:266). The Foucauldian theory is of the view that those with knowledge have power to control those without while the functionalist theorists find it efficient for health practitioners to have control and dominance over patients (Lupton, 2012). Their standpoint is that doctors and nurses are skilled and knowledgeable in the medical issues hence, should be trusted to deliver proper treatment (Lupton, 2012:117). This shows that medicine has its own culture of how they relate with patients; although this might seem to be 'abusive and oppressive of patients' right and agency' it has its benefits if the doctor and patient reach a consensus or mutual relationship (Lupton, 2012:136). For example, some food allergic participants indicated that while there might not be a cure for allergies they received good advice on food avoidance and effective way to manage the allergy symptoms.

In contrast, this study shows that the implication of such framing for the politics of knowledge is problematic. Most participants did not only rely on the biomedicine because it failed to prove its superiority or to provide a definitive cure for food allergies.

In addition, the power dynamics in the biomedicine may cause patients to feel disempowered if the doctor discourages collaboration. During medical consultations, both patients and doctors should openly engage in the discussion about the illness in order to have a better understanding and bring positive outcome (Lupton, 2012:116).

Health related studies show that, harmonious patient-doctor relationship helps the management of food allergies while poor health care services such as poor counselling deter individuals from adhering to treatment plan. In this study, two food allergic participants indicated that they failed to adhere to the treatment given due to poor communication with the practitioners and fear to ask for other medications. Thembinkosi revealed that his questions of the causes of side effects were "unanswered" as the doctor's interpretation was not true and this led him not to adhere to treatment and preferred to heal 'naturally' or without using any remedies.

Spanler (2010) points that, sometimes patients' symptoms are not taken seriously and that some physicians only concentrate on the physical symptoms and ignore the questions patients may have. This study reveals that, symptoms that health practitioners cannot explain and absence of permanent treatment cause patients to think that their illnesses are not taken seriously and this feeling worsens if one experience medication side effects and poor communication with the health practitioners. Moreover, poor doctor-patient relationships cause patients not to adhere to treatment with the view that it is better to heal 'naturally' than to aggravate the pains with unhelpful treatment. The other participant said,

> "I don't take the medication regularly because (laughs) they were giving me injections every month....ahh ahh I couldn't" (Nozy).

For Nozy, the problem was the type of medication offered since she generally fear injections and prefer tablets. Shapiro and Shapiro (2010) assert that poor communication skills with the health practitioners can be a reason of nonadherence to treatment. Nozy did not discuss her problem or preferences with the nurse instead she favoured to skip medication. The other reason is that the injections did not help her in removing the rash and scars on her body instead it only supressed pain.

Moreover, Nozy, Asande, and Sihle indicated that if the public health care systems offer them treatment that removes the "permanent" marks on their skin they would adhere to it. However, these are usually unavailable, and they could not afford to purchase the prescribed medication from the pharmacy. Shapiro and Shapiro (2010) assert that, in general those who have better motivation to adhere to treatment provided by health practitioners usually enjoy the activities in their lives, experiencing less depression and have better socioeconomic status. Similarly, in this study individual or family's economic status influenced the health seeking behaviours of young people living with food allergies as discussed below.

4.5 Socioeconomic status influence health seeking behaviours

Shapiro and Shapiro (2010) indicate that treatment adherence interlink with personal factors and different strong situational factors like socio-economic status. For example, individuals from low socioeconomic status may not afford the food allergy tests, medication and other services offered in private health care. As a result, this may cause them not to do allergy tests thereby failing to know what they are allergic to and may not find the need of starting the treatment. The Marxist theory explains that one's access to quality health care is influenced by their socio-economic status and level of education (Helman, 2001:215).

Using the participants' biographies provided in the appendix, I analysed the data to find if there is connection between economic status and health seeking behaviours. In this study, consulting at a public health care system was due to unaffordability to consult the private systems. Inequality in accessing health care and services shows the legacy of "racial" discrimination; there are a lack of resources, generally, allocated to the public sector (Bradshaw, 2008). While food allergic reactions affect a small proportion of the population, the availability of diagnostic tools and treatments are readily available in the private healthcare sector, which requires a cost to be borne by the patient. Socioeconomic status determines health related behaviours; the less money one has, the lesser the chances of accessing better-quality health services (Mayosi, Lawn, van Niekerk, Brandshaw, Abdool and Coovadia, 2012).

Conversely, Kyra experienced "permanent" wounds on her scalp and in order for them to heal she consults, both a physician and a dermatologist who is also an herbalist at a private health care. During consultation she openly discusses about her condition and receive different medications either medical or herbal medicine, and she chooses the one that works better. During the interview she also said,

> "On my skin (the wounds caused by sugar), it stays for a long time, it's mainly on my scalp then it comes down to my ears and then it comes across my neck and chest. So I have been in a very strong medication to heal my skin, it looks like a chicken pox that has been squeezed. Now I have a medication that really works well and a special shampoo and if my reactions are really bad I soak, I leave it on my head and the relief is instant, but the healing takes longer.... I have been to the doctor, I have been for skin tests and blood tests.... I have a special shampoo that I have to use on my hair because even if I don't eat sugar there are so much things with sugar that should not be having sugar in it. So that's why I use it all the times....when I am stressed my reactions are ten times worse. When my reactions are severe I take other medications"

Kyra affords to consult different health specialists who provide her with effective drugs for her chronic condition. Access to healthcare in South Africa is determined by availability of facilities like testing and treatments as well as consultants and specialists. The public health service in South Africa is under resourced and understaffed with a high patient burden with myriad conditions to manage, hence conditions like food allergies (despite being chronic) receive less attention and care. This means that availability of treatments and tests for food allergies is usually found in the private sector, but this becomes inaccessible to people without the fiscal resources like medical aid or being able to pay out of pocket (Amzat and Razum, 2014). Petti, Polage, Quinn, Ronald and Sande (2006:377) agree that in Sub-Saharan countries, the public health sectors have limited resources to diagnose laboratory testing.

The after effects of allergy reactions (body marks) that Kyra experiences are less or more likely the same with that of Asande, Sihle and Nozy. Sihle has black "permanent"

spots on her back that started when she experienced food allergies while Nozy has scars that "spread" every time when she ingest fish. Asande has marks that began when she was healing from the ringworm caused by vanilla allergy. They all consulted at a public hospital and did not receive medication to remove the "permanent" body marks. Unlike Kyra, their body marks are visible because, they do not afford to purchase effective medications that health practitioners recommend. This shows that prevailing socioeconomic inequalities in South Africa as detailed above, have a debilitating effect on food allergic people as they fail to access quality health care (Amzat and Razum, 2014:108). During the interviews Sihle, Nozy and Asande explained how they failed to get rid of their body scars and how this links to their economic status. Below is a response that Sihle gave;

> "I grow patches something like fungus infection....it messed up my back....It pains a lot....I am worried about these spots, I know I can get rid of them because the doctor told me but it's money".

Poor socioeconomic status influences ones' health seeking behaviours and leads to continuous ill health. Although Sihle and Asande work part time as Kyra their individual or family's socioeconomic background differ, they have no financial support from their families, the little money they earn is spend on other basic needs and this makes them fail to purchase medications such as one that Kyra uses.

In the literature, it was discussed that the importance of doing clinical tests is that when patients fail to acquire proper food allergy diagnoses or appropriate medical treatment they may misdiagnose themselves and take wrong medication (Holland and Jarvis, 2007:97; Coulson and Knibb, 2007:154; Booth and Knibb, 2000:183). However, this is a challenge to those who cannot afford the allergy tests offered in the private health care systems as discussed earlier. On the other hand, health practitioners also find it problematic to distinguish reactions of food allergies and tolerance if one has negative immunoglobulin E (IgE). However this does not completely rule out an allergy as some receive positive IgE results when they have not experienced any food allergy symptoms or when they have outgrown them (Race, 2012:95). As a result, both the privileged and

the disadvantaged individuals find what they are allergic to using the food elimination method.

4.6 Finding the allergen; changing the diet, the environment and asking for spiritual intervention

I assessed other non-medical methods used by food allergic participants in trying to find the causes of the symptoms or what they are allergic to. The changing of diet and re-introducing the eliminated foods was the most technique used.

Currently, there is no cure for food allergies in biomedicine; the best way for allergic individuals to live healthily is to avoid the allergen. All the food allergic participants mentioned that they changed their diet regardless of the medical report or effectiveness of the medication prescribed. Sampson (2003:541) asserts that when experiencing adverse food reactions, individuals often use elimination diets in diagnosis and managing the condition. Food allergic patients who did not do food allergy tests and whose laboratory testing did not conclusively pick up the allergen had a role to find the allergen. This was done by, removing different foods from their diet and re-introducing it again after some days to find if it offends their immune system.

Food allergic participants pointed that they would eat one group of food for two to three days for all the meals. In trying to identify the allergen, they were cautious and avoided other types of food in their meal. During this process, they kept chronological records of every drink or food they ate and indicated all the symptoms that they experienced. If they did not react to the ingested food, they introduced another group of food in their 'diet list". In cases where they reacted like experiencing stomach ache, diarrhoea, vomiting, or itchy on the body after eating certain food they recorded that as a reaction and immediately removed it from their diet. However, some waited for the symptoms to clear and re-introduce that food to see if they will experience any allergy reaction. For example, some said, "I tried to eat fish several times and I was reacting" (Tinotenda), "I went back and ate fish again to see if it was really a problem or my imagination" (Thembinkosi), and "Later I tried to eat the food again then it started" (Asande).

The participants presented the importance of being vigilant, patient and to record all ingested food and symptoms that occur after ingesting any food or drink in order to identifying the allergen. This study shows that, the found that food-elimination rotation diet is the quickest and best way of identifying and overcoming food allergy reaction. Although the allergic individuals are required to prepare to face the allergy reactions during elimination diet process. In this study, all food allergic individuals did this method in a home setting and stood by themselves or received support from their kin or friends as none of the health practitioners or nutritionists helped them.

However, it is essential to be ready to immediately consult a primary health care system or have allergy medications such as allergex pills and epinephrine injection during the food elimination process because this is a precarious method. Allergy reactions can lead to death especially if one experiences shortness of breath. In chapter 2, I discussed that, food allergies have an impact on broader social life means and the social learning theory emphasises that there is a strong relationship between individuals' behaviours, experiences and their setting hence, the person at the centre of the experience needs to live in a supportive environment in order to cope easily. In the study, it was revealed that in cases where they felt isolated or when the family and friends gives little support, their patience of finding the allergen reduced and causes other health problems like stress (Gilissen et al., 2006:173).

The "searching" period for food allergy was different to the respondents. Some took a short period for example, Kayley said, "it wasn't really much of a problem" while Cara said, "It took me a week maybe". Sean reported, "within 2 weeks I knew that I was allergic to it". I found that those who easily identified the allergen had consulted a nurse or doctor the first time they started experiencing strange symptoms. Health practitioners advised them to find the suspected food by ingesting all types of food they had eaten two days before they experienced body reactions. For that reason, it is advisable to seek medical help if one experiences allergy related symptoms. Foucauldian theorists assert that health practitioners have better knowledge and provide better advice in this instance, on how to trace the cause of the illness easily (Lupton, 2012). On the other

hand, elimination diet method is far more difficult if the food ingredient is present in so many foodstuffs like food spices and sugar. Thembinkosi and Nozy had to take about one year to discover that they are allergic to fish and it took me approximately two years to identify spices as an allergen ingredient.

The other methods used in trying to find the cause of the body symptoms was the changing the environment and the changing of body creams because climate changes were assumed to be the cause.

Changing environments and body lotions to cure allergy symptoms

The knowledge about different causes of illness symptoms influences individuals' health seeking behaviours if they experience symptoms that look similar. Studies show that individuals are no longer passive when receiving health information or treatment. Instead, some may assume that the reactions are due to environmental risk factors such as the change of place or weather (Fainzang and Haxaire, 2011; Bengt, 2005). Some food allergic individuals had learnt that exposure to heat or rain may cause skin diseases hence, they assumed that changing of environment or climate were responsible in causing reactions. This explains why Onesimo and Thembinkosi were using the skin or sunblock creams. Onesimo stated that when she was residing in the city of Cape Town she never experienced the reactions because, it was colder than Johannesburg so, she assumed that the reactions were caused by heat in new city. Similarly, Thembinkosi assumed that the heat in Johannesburg was causing the rash. Asande pointed that during rainy season some people have ringworm so she thought it was beginning to affect her too. Asande also indicated that her aunt's friend said in Ndebele culture (for Zimbabwe) having body itch is "*inkomo*" – a body reaction that is caused by cold or wind and easily cured by eating porridge made from "*amaxolo ehlwili*" (the *bucks* from a tree called *ihlwili*). These interpretations caused Asande to ingest porridge with traditional herbs of *amaxolo ehlwili* that were collected for a traditional healer. Scientifically it's proven that extreme climate changes both winter and summer can cause skin diseases causing cancer, rash, and blisters, peeling and cracking or exacerbate skin conditions. So, it is this very knowledge acquired that

caused these individuals to make assumptions of what caused their skin conditions and continued ingesting the allergens that worsened their health.

Furthermore, the confusion the food allergic individuals have also exists in biomedicine. Gray and Kung (2012:24) state that in South Africa, individuals may have environmental allergens or cross-reactivity. For example, have grass pollen allergy together with soya allergy and failure of the Food-specific IgE (sIgE) to consider this may result in false laboratory test (Gray and Kung, 2012:24). As I was personally trying to find the cause of strange symptoms, doctors advised me to change soaps and lotions because, they thought I might be reacting to those.

4.6.1 Misinformation and mislabelling of food products challenges the elimination diet method

Food allergic participants' responses on how they accidentally ingested the allergen

> "On cold drinks they don't label all the ingredients so I avoid them" (Kyra).

> "At some point people thought there wasn't tinned food and I reacted may be after a week because I don't react immediately" (Sihle).

> "I once attended a wedding and I was told that there was no fish in the salad but I could tell that there is fish so I may be I ate two spoons. I didn't react on it but I felt my body itchy" (Thembinkosi).

In the literature it was discussed that the ambiguity and complexity of information shown on a food label explains the reason why individuals continue experiencing food allergy reaction even after identifying the food that their immune system rejects (Colson and Holford, 2012:9). For example, the mislabelling of ingredients on cold drinks led Kyra to experience severe allergy (sugar) reactions after drinking them but they were labelled "sugar free". Moreover, Teitel and Wilson (2001) assert that one author who was preparing food for his vegetarian friends was shocked to find peeled white potatoes in two different large cans that were labelled red kidney beans. These circumstances destroy the assumption that food is carefully monitored from the manufactures to the

supermarkets. The trust that we often give the farmers, food sellers and the government food inspectors because we are not guaranteed that the food is constantly labelled correctly (Teitel and Wilson, 2001).

As pointed in the literature review, DuunGalvin et al. (2006:1340) argues that food manufacturers are less concerned about the effects of poor labelling to food allergy consumers. This is supported by Marx's view that those who own the means of production have power to control the consumers, a relationship similar to perpetual dependency and have less concern about the negative impact of their products. Errors of food labelling and packing threaten the lives of food allergic persons as they try to find what they are allergic to or when coping with the condition. Most food allergic participants indicated that they are afraid to buy food packages labelled "may contain" the allergen.

4.7 (Mis)interpretations of food allergies

Sociology of diagnosis is an important lens to use when diagnosing individuals in the primary health care system because illnesses in different communities maybe misinterpreted or interpreted differently. It is important to understand the patient's perspectives in order to provide effective treatment. For example, indigenous healers may declare food allergies as "cultural illnesses" and prefer to only treat them spiritually. However, if the health practitioners explain the importance of using medical treatment such as food-elimination without dismissing their cultural or religious beliefs, it is likely to come up with an effective treatment plan. Food allergic participants engaged in prayers, consulted prophets, pastors or used traditional herbs in trying to find cure for food allergies.

Individuals preferred to "window shop" for food allergy treatment because biomedicine did not provide cure for this condition. Cottencin et.al (2006:791) argue that dissatisfaction with biomedicine influences people to consult the complementary and alternative medicine (CAM) practitioners with a hope to find cure for chronic conditions that they have suffered for too long. Earlier on I discussed that Kyra consulted an herbalist and found stronger medication (peppermint oil and drops) to treat her allergy

reactions. Asande indicated that in Ndebele culture they believe that natural herbs provided by *sangomas* are effective in treating sores. Although Asande was confused if the medicine provided helped the abscesses to dry quickly, the food allergy studies show that natural food allergies treatments and supplements can help to reduce the development of food allergy symptoms, boost immune system and enhance the gut microbiota (Ortolani and Pastorello, 2006).

A holistic approach to treatment should be developed in all the health care systems or the patients should be advised to use medicines provided by registered CAM practitioners if they believe them to be useful. Studies show that CAM allows patients to regain a sense of control and hope in order to enhance well-being. Moreover, indigenous healers mostly share similar socio-cultural background and relate in the same level with the practitioners (Weiss and Lonnquist, 2017:309).

In the study, the Christian God was believed to do all things that seem impossible including healing people with all types of diseases. Some food allergic individuals believed that as they pray they will eventually heal. In addition, there are pastors and prophets who indicate that they have authority (from Jesus) to cure people with all types of diseases and some have documented proof making those who are ill to attend their healing services for a miracle (Spangler, 2010; Chuang, 2009).

Food allergic participants' responses on why they followed their cultural or religious beliefs

> "I was eating the fish but when I was16 (years) I was told that I have a mermaid spirit[3], I began to have a fish allergy few months after the prophecy, by then I was 17(years)....even the members of the family....first tell me and say this is the fish that we bought can we have permission to eat. If they don't do so after eating they may start chocking, have pimples or dose off while holding the fish. So I have a fish spiritual allergy like" (Tinotenda).

[3] A mermaid spirit *is a mythical being, whose body is shaped as half woman-upper body and half fish the tail.*

> "For this reaction to stop, I had to be prayed for at church, the pastor did call out, and said, "I see people who are allergic, I want the allergy to come out". And from there, I never experienced allergies....I think my allergy was a spiritual thing because after I was prayed for by the pastor I now eat fish" (Onesimo).

Onesimo and Tinotenda pointed that food allergies are spiritual or defined them as a cultural illness that required a spiritual intervention or cleansing. However, other respondents pointed that they do not believe there is any connection between spiritual attacks and food allergies. In trying to overcome the spiritual attacks that came in form of food allergies, Onesimo and Tinotenda engaged in religious rituals like prayers and fasting together with their prophets. In the literature review, I discussed that if food allergies are explained as "cultural" illnesses it influence people's health seeking behaviours as they would seek spiritual healing from pastors and traditional healers than consulting the health practitioners. Onesimo and Tinotenda viewed biomedicine as unnatural and lacking a holistic approach to health because it only concentrates on the physical problems and ignore other factors such as spiritual and social. Their criticism of this system is also due to its failure to cure food allergies or chronic conditions.

The failure to explain causes of food allergies in the biomedicine causes individuals to 'believe' different explanations provided in their communities and this impact on their health seeking behaviours. When Tinotenda started having shortness of breath and dry rash on the face and neck her cousin sisters suspected that it as a spiritual attack as she was previously prophesied that she will be attacked by a mermaid spirit. This corresponds with what was discussed in the literature. Some Africans believe that food allergies are manifestations of many factors leading to questioning *why* one's body is reacting and seeking spiritual explanations instead of finding *how* it can be cured (Hershock, Stepaniants and Ames, 2003:343; Hundt et al., 2002:443).

Tinotenda never consulted a primary health care system because her allergy symptoms were interpreted as a cultural illness. They believe that it was a spiritual war manifesting in the physical meaning, a mermaid spirit that is partly fish lives in her body and responsible for causing fish allergy reactions. Religious background or beliefs influence

the definition of illness and the health related behaviours in trying to treat the symptoms. Faith based healing system are considered effective and ethical because they use a holistic approach that looks at the spiritual and physiological body (Weiss and Lonnquist, 2017).

Tinotenda's food allergy is complex because it is spiritual. She indicated that whenever her family members want to bring or eat fish at their home they should consult her and failure to do would result in the development of "pimples or dosing off". This gives her authenticity that indeed she has a fish spiritual allergy that is 'spiritually contagious' if the spiritual instructions are disobeyed. It is difficult to provide medical explanations to why her family members react to fish when they sometimes not react when they ask or announce before ingestion. There may be challenges in using both the alternative (social) and clinical diagnostics, and this probably explains why Tinotenda and her family preferred to only consult a faith based health system. An advantage of using folk healers is that the indigenous healer and patient's relationship is very close because they reside in the same community, share same basic norms and they recognise the importance of establishing rapport with their clients and provide them extensive time to ask what is not clear (Weiss and Lonnquist, 2017:309).

Tinotenda tried to use anointed materials such as clothes and water but she was not healed. She interpreted her condition as caused by God as the same spirit helps to help people or to get money through prophesy. The cure that she uses is similar to that of the biomedical model of health; she eliminated the offending food from her diet as advised by her church leaders. The elimination of offending food is therefore, a single and most effective method used to treat food allergies when using either biomedical and or other health care systems.

On the other hand, Onesimo pointed that she received permanent healing through Jesus Christ hence, health care systems are incomparable. A disease that cannot be cured in the biomedicine may be healed by indigenous doctors or vice versa. Similarly, Spangler (2010) gives an example of a boy (Andrew) who started experiencing severe apple food allergies from infancy whenever he mistakenly ate them. He started experiencing a bad case of diarrhoea and blistery rash. When Andrew was a toddler, his

mother took him for a healing service where a man who was leading the service said, he believed that God was healing a person with severe allergies. Although Andrew believed that God healed him, his mother did not believe the faith of the toddler. Finally, she gave him apples in different days, ate and never experienced any reactions. Additionally, Koening, Bearon, and Dayringer (1989) found that almost 25% of the physicians believed that faith healers can divinely heal individuals whom they cannot help in the biomedicine but were sceptical about spiritual healing as some healers are practicing without license and may take advantage of vulnerable individuals (Weiss and Lonnquist, 2017).

Onesimo experienced food allergies for four years and today she has about three years eating fish without experiencing any allergy symptoms. She believes that it is her God who healed her. This is divergent from the biomedical model of health that explains that, people out grow food allergies naturally especially those with one food allergy and eczema as the symptom (Race, 2012:95). However the timing of when this exactly occurs is tough to predict. Although Onesimo claims that healing came through prayer, the explanations given by the biomedicine makes it difficult to conclude that the cure was purely spiritual or her body naturally out grew the food allergies. In most cases, after practicing certain religious rituals, individuals are often encouraged to eat the food they are allergic to and have faith that they will not have any illness symptoms. However, health practitioners emphasise that if individuals feel they will not experience any allergy reactions after eating the allergen they should first do further allergy tests with allergy specialists to verify that they have really outgrown the allergy because one might experience anaphylaxis reaction or die.

The complexity of health or cure provided by religion and biomedicine qualify for further discussion. In understating the spiritual world and shared cosmological beliefs, Durkheim and Weber provide classical sociological discussions. Moore and McClean (2010:27) point that "for Durkheim religion represented "the social collective", for Weber this was "moral individualism" and subjectivism. Both principles are central to discussions concerning the traditional and the modern, superstition and science, and, as a consequence, to seemingly competing (health) paradigms in the Western world."

Weber asserts that, supernatural ideas are only resorted to when individuals face problems such as illness because these have been isolated in the modern economic, social and cognitive structure (Moore and McClean 2010). For example, a study conducted in Northern Ireland shows that physicians have different responses to indigenous healing systems as some believe that individuals can find cure and recommend patients to folk healers while some have hostile views (Moore and McClean 2010). However, some who were sceptical knew that for their practice to be effective the local health beliefs and practices should be taken into consideration; hence, they permitted patients to use their religious materials within the primary health care setting. Folk health knowledge and practices should not be neglected because it provides a holistic approach that helps health practitioners to understand the wider psychological, social and environmental needs in different communities. Moore and McClean (2010) stipulate that belief systems such as folk beliefs, healing and medicine remain vital in attempt to identify motives that explains what influences people's health seeking behaviours. For example, in this study in different cultural contexts, the factors linked to food allergies include weather, failure to follow cultural norms, holy and demonic spirits.

It is important for people to be permitted to use alternative healing systems as done by other South African primary health systems that have plural heath care. A plural health care system offers health practitioners a mutual and better understanding of the illness from the patient's cultural perspective, and possibly offers relevant health educational services where there is confusion (Goody and Drago, 2010). Cottencin et al. (2006:791) assert that CAM is taught in conventional medical schools and aims to supplement but not replace biomedicine as a result there are central in providing behavioural-health promotion campaigns.

In African communities, factors assumed to be causing food allergies or allergy symptoms include evil spirits, individuals' failure to follow cultural norms or values and being a premature child. Tinotenda states that people in her community in Zimbabwe and some who reside in South Africa assume that her food allergy reactions are triggered by evil spirits. Food allergy symptoms are defined as spiritual attacks rather than a physiological problem. Naledi pointed that in the Xhosa culture some believe that

growing an abscess on an eye is a sign that the person has deprived a pregnant woman what she would have asked. The failure to understand the causes of body symptoms leads to shaming and false accusations of not following cultural norms. Misinterpretations of allergy symptoms show that this condition is not well understood which may influence the health seeking behaviours of those who are affected.

In a Zulu community, some people persistently defined Thembinkosi's food allergy as caused by premature birth with a belief that there is a connection between being a premature and being sensitive to food. Thembinkosi did not enquire how to cure food allergies as a premature child in the Zulu culture because to him this description was imprecise. Conversely, the 1995 Manitoba Birth Cohort study aimed to find if premature or low-weight children have a higher risk of developing food allergies when compared with normal-birth-weight children basing on the theory that such children have increased gut permeability (Liem, Kozyrskyj, Huq, and Becker, 2007). The results of Cohort study showed that no gestation age had a statistically significant augmented danger for food allergies. Being premature is not associated with risk of having food allergies so these are lay beliefs or scientifically void arguments.

Food allergic participants gave different lay belief explanations about the aetiologies of food allergies that they heard from their communities. Lay concepts refer to a mix of non-professional knowledge, expertise and experiences mainly based on the norms of the society. Different lay health beliefs stated show that food allergies are deep rooted in the socio-cultural context.

Food allergies mistaken as other diseases

The food allergy symptoms are un-concealed and often mistaken to diseases such as HIV/AIDS or herpes because of the symptoms similarity. For example, the swelling of feet and hands, diarrhoea, having peeling skin conditions and body rashes. Equally, in a food allergy research, one teenager stipulated that having food allergies caused her body to look unhealthy to an extent that one classmate was confident to ask, "you have AIDS don't you?" (Taylor, 2002:16). Food allergic participants believed that people

gossiped about them and assumed that they are HIV positive. Food allergies may be misinterpreted in some South African communities hence it requires the affected to be resilient when they receive negative comments. HIV positive individuals with low CD4 count cell may start to have food allergies or experience severe food allergies because HIV virus destroys some white blood cells and weakens the immune system but, having body reactions does not mean being HIV positive. As pointed by Onesimo, our bodies react differently due to diverse reasons; one's delicious meal may be a poison to another.

The confusion of food allergy with HIV/AIDS or other diseases was also done by food allergic individuals themselves some thought they are sick with other diseases when they were actually reacting to food.

Food allergic participants' responses on how they (mis)interpreted food allergies

> "You would laugh at how I reacted to the spice symptoms....the rashes were severe, I asked myself if I was ok or HIV positive but I knew nothing (had not engaged in sexual intercourse) and I knew that my parents were HIV negative. You know what I did? I went to test for HIV because I was like, what's this. If I had pictures *lawe* (you too) you were gonna see what I mean" (Nozy).

The responses to body symptoms occur within cultural context where individuals and their communities use socially patterned ways (Katon, 1989:411). The reasons for worrying more about body symptoms and having assumptions that it is HIV/AIDS is because within South African communities this disease is often spoken about. Alertness about certain disease creates psychological problems or phobia, misinterpretation of symptoms and exaggeration of pain (Katon, 1989). As discussed in the literature, the fact that food allergy symptoms are un-concealed, affected ones experience enacted-stigma. They fear how the symptoms will be socially interpreted and how it will influence their health and social relationships.

Food consumption, preservation and production suspected to be causing food allergies

Other participants in this study also indicated that when they began to add too much spices in the food and eating too much tinned food and vanilla they began to have food allergies. Although the causes of food allergies remain unclear, scientific studies show that there is no relationship between development of food allergies and consuming large quantities. If there was a relationship, most people should be allergic to bread, pap and rice because these are consumed almost daily. Similarly, studies show that poor storage or unsealed cans can lead to food poisoning not food allergies as suspected by Cara.

It is highly possible that food allergic individuals begin to recognise that they have allergies after developing severe reactions as discussed in the literature. Too much consumption of offending food causes severe allergy reactions such as anaphylaxis. As discussed in the literature, Onesimo suspected GMOs to be causing food allergies because agrochemicals are harmful and adding new food ingredients in animals may cause food allergies if the one is sensitive to them (Sanders, 1999; Brown, 2007).

Genetic factors

In the literature, it was discussed that there is a strong relation between immunoglobulin E (IgE) and alleged genetic food allergy (Bengt, 2005). In this study, some food allergic individuals indicate that their family members had similar food allergies or related symptoms as shown in **Fig. 4** in the appendix. However, none of them indicated or assumed it might be genetically connected.

Fig. 4 shows that related individuals have matching food allergies or body reactions. It is possible that family genetics play a crucial role in the rise of food allergies. Teitel and Wilson (2001) stipulate that food allergies can be genetic but this does not necessarily mean parents and children will experience same allergies. One family may have different food allergies. Conversely, a study conducted in UK shows that children with parents or siblings with peanut allergy have a 7-fold increase in the risk of having the same allergy (Hong, Tsai and Wang, 2009). In the same country, one study showed that

relatives of those allergic to peanuts have higher frequency of peanut allergy when compared to general population (Hong, Tsai and Wang, 2009). Having similar allergy symptoms influence the health seeking behaviours of individuals for example it may lead to self-diagnosis or sharing of remedies as reflected earlier in the case of Sihle and Lihle.

4.8 Gender differences in health seeking

In seeking help concerning the illness, the female respondents showed much concern about their health as compared to males. In this study, five of food allergic participants who used more than one health system or methods of treatment were females. For example, some used self-diagnosis method, consulted doctors, nurses, pharmacists, and herbalist or prayed about the condition. Although only two men participated in the study, none of them used more than one method. Roberts (1991:86) stipulates that men rarely consult about their health status regardless of the pain severity because that is how they are socialised and this leads to high death rates of men than women.

In this study, 91% of the food allergic participants indicated that they sought medical treatment whenever allergy symptoms occurred but more physical consultations with the biomedicine was more on females than among men. Thembinkosi stopped adhering to his medication at the age of 12 regardless of the severe symptoms experienced. To support the view that men are reluctant to consult or to take medical treatment, Sean only consulted his mother who is a nurse. However, he mentioned through the media he found that people die of food allergies hence values his medical treatment. Ayers, Andrew Baum, McManus, Newman, Wallston, Weinman and West (2007:221) state that when symptoms appear quickly, patients usually judge them as serious and seek medical attention regardless of their gender.

The socio-cultural context of individuals influences their health seeking behaviours. Young men in South African communities try to meet cultural demands by engaging in risk behaviours that relate to masculinity, such as being strong and expressing power

rather than pain or grief. Failure to right the wrongs and encouraging them to seek medical attention will lead to poor health among them; preferring to heal naturally may cause more health complications. People's understanding on how they should show pain or seek help is influenced by their institutional, structural, cultural values and practices hence understanding their attitudes and health behaviours will help to design and promote better health plans. Good and Drago (2010) state that the involvement of cultural beliefs and families when diagnosing patients limits vulnerability of the patients and gives them hope.

4.9 Food allergies and impact on social relationship

Living with food allergies is having a life threatening condition that contributes to poor social relationships. People have different perceptions about food allergies while experiencing difficult times. They may be expected to adhere to cultural norms such as eating and drinking with others and that may threaten their health. In the literature, it is discussed that many social gatherings involve eating and failure to partake in that may lead to isolation and labelling such as being "fussy".

Food allergic participants' responses on how the condition affected their social life

> "People said I am choosy....uyasokolisa (a problematic person), I should just try to eat the food" (Cara).
>
> "Other people think it's in my head and they think I am being over dramatic....I think they are lot of hypochondriac and everyone think I have a new disease, or think I have Googled something and now I have the mask brain trauma[4]" (Kyra).

Separating oneself from eating is often misunderstood as people begin to assume that such individuals are "isolating" themselves, being "dramatic" or "choosy" selecting where, when and what to eat leading to be labelled as "hypochondriac" or to be discriminated against. As explain in the literature, eating is not only done to get energy

[4] Mask brain trauma means self-diagnosing or imitating or faking symptoms that one has seen read from Goggle.

but it is a norm, a sign for unity especially in social gatherings such as outings with family, friends and in celebration. Some participants indicated that denying food that their relatives have prepared weakened their relationships. Nozy said, it is part of her culture that when one visits, a meal is prepared and this helps them to build relationships. However, some relatives questioned why she began to isolate herself in preparing meals or eating when she visits them and thought she was lazy to do the household chores. In trying to fulfil the gender role expectations and to maintain relationships she sometimes cooks with her cousins, eat food that has spices and take medication afterwards. This study revealed that cultural values put on food sharing among communities have a negative impact on health of those with food allergies. In addition, this study shows that, there is a gender attribution to preparation of food that the food allergic individuals challenge or fail to resist at times.

Eating fulfils cultural and psychological purposes that may crank up pressure to eat all the served food and this threatens the lives of those who will be trying to identify or avoid the food allergen. Young people try to connect to their peers regardless of being labelled. However, these social networks reinforce behaviours such as taking risks, resulting in the normalisation of living an unhealthy life. During the interview, Sean stated that, failure to engage in these practices such as eating out with friends is perceived as deviating from the group culture and at some point he opted to abuse alcohol that helped him to be confident and brave when eating out. However, he once experienced severe allergy reactions through streaming and itchy eyes and never tried to risk or to eat out with friends while taking alcohol.

In trying to be honest about restrictive diet, explaining the risk of eating and preferring to eat specific food that one prepared at home it may lead to blame and isolation. Goffman (1963) argues that stigma is influenced by social identity because the identity that a person conveys categorises them either as normal, meeting expectations or undesirable and failing to meet expectation leading to stigmatisation (Gray and Kung, 2012:46). The labelling theory asserts that when individuals are continuously discriminated they may be negatively affected and opt for coping mechanisms of secrecy and withdrawal.

Young people lack knowledge about risks and regrets that may be caused by luring and encouraging their friends to ingest offending food. In the study, some food allergic participants indicated that they isolated themselves from lots of friends especially those who did not understand their health seeking behaviours or the importance of having a restrictive diet. Living with food allergies has an impact on the social relationships and the health seeking behaviours are rooted within the individual's social and cultural contexts.

Food allergic participants indicated that sometimes they are not trusted when they say that they react to certain foods. One of the reasons why people think being allergic is being dramatic or framing bogus stories is that today the media often portrays being healthy as associated with dieting, eating less and losing weight. Individuals therefore assume that pointing food allergies as a health condition is a strategy to maintain a healthy life. For example, Kyra said,

> "People instantly think of that movie with white chicks and think of those glamorous scenes and they think oh it's funny, it's not funny".

Food allergic participants were often blamed for imagining non-existing diseases, imitating what the media shows, told not to exaggerate a condition that "does not kill" and encourage to eat every served food.

In this study, the food allergic individuals stipulated that in trying to find what they are allergic to, they developed symptoms that affected their social relationships. For example, they found it challenging to socialise with their peers because, they looked strange, experienced discrimination and thought they were gossiped. Asande said, when she developed ringworm she preferred to be indoors because in her community these symptoms are associated with living in a dirty environment. Some found dating difficult because, it involves eating out indicating that it is not pleasant to explain personal problems in an initial meeting, to be seen describing so many things to the waiter and to wait for a long period for a special meal while others are eating. In addition, some mentioned that their food orders usually cost more if they are not on the menu. For example, Kyra said, "my life style is more expensive now, I eat less but I am

charged more". Therefore, when eating out she prefers to pay for her bill but some people who would have offered to pay find it difficult to understand her.

Although some food allergic participants pointed that they value their safety and health than impressing individuals or valuing cultural norms, some indicated that they are highly sensitive and may be triggered by the allergen by simply inhaling it so they avoid eating out. For example, Cara said,

> "When I get into a room where they cook tinned food it feels like I just ate it, I start reacting the same way but fish specifically."

When food allergic individuals are eating out or attending social gatherings it is advisable to have epinephrine auto-injector or other allergy medications because inhaling the allergen may trigger the reaction. However, individuals indicated that once exposed to the allergen they take their medication but they do not carry it often.

4.9.1 Young people and risk-taking behaviours

On the other hand, some participants preferred to go out with their friends, eat the provided food and take medication soon after ingesting because in social gatherings like weddings it is hard to know the added food ingredients. Moreover, in self-serve meals one would not know whom to enquire from. DuunGalvin et al. (2006:1339) argue that, sometimes youths face peer pressure to dine out and fail to follow their restricted diet due to guilty and in fear of the social exclusion consequences. It is essential to recognise fundamental themes in the way which young people perceive food allergies.

Studies show that, young people experience more food allergy reaction when compared to other age groups because they have a "risk taking behaviour" (DuunGalvin et al. (2006:1339). In analysing the data collected, I found that only 4 out of 11 participants were able to control themselves or avoided eating offending food regardless of the pressure they received from their peers. Some participants highlighted that the reasons why they prefer to eat offending food includes trying to avoid being the odd ones among other people or to deviate from the societal norms and impressing their friends. One the other hand, those who avoided eating out with their friends stipulated the importance to

checking on their friends to maintain social identity. For example, they commented on pictures that their friends posted on social media about their outing. In the literature I discussed that, youth is a transitional period that requires a need to belong. Although food allergies separate one from others, the participants in this study showed that they are able to resolve this and maintain their relationships with peers.

This study revealed that, individuals eat or inhale offending foods deliberately due to lack of choices and access to food that their immune systems favour.

Food allergic participants' responses on why they ate or inhaled the offending food knowingly

> "The reason why I ate tinned food continuously is that *umama* (the mother) was hardly around and my brothers didn't cook, so we ate tinned food. I grew up with boys so they chose what to cook and I ate what they had prepared. I didn't know how to cook" (Sihle).

In the literature, it was discussed individuals may eat offending food knowingly due to poverty as it limits one's choices to buy other food. This is more or less similar to the results of this study but the difference is that Sihle's reason for eating offending food was due to her dependency as a young person and her inability to cook. In addition, Kyra works with sugar in making skulls as part of her Masters - art work, she always protect herself using gasmasks but at some point her body becomes hypersensitive and she reacts to the allergen. Ingesting or having contact with allergen may be caused by having little or no choices of other food or working in precarious environment, respectively.

Food allergies affect academic and work progress

Earlier I discussed that poor social relationships or environmental challenges influence one's health related behaviours and that stress can worsen body symptoms. Some food allergic participants indicated that living with food allergies is stressful and may lead to self-questioning.

In this study, the food allergy experiences were described as "bad, nightmare, devastating, terrible, embarrassing and hurtful". In the Essen Epidemiological Anxiety Allergy study, people with a variety of allergies were found to be at five times the risk of developing panic disorder compared to controls (Schmidttraub, Bamler and Schafrathrosario, 1995). Therefore, a better social environment is one that understands what food allergies are and this can improve positive socialisation and better coping skills.

The food allergic participants noted that the allergy reactions affected their academic progress and their part-time work. The food allergy symptoms are sometimes very painful, itchy and one may fail to see, walk or talk because sensitive body parts like eyes, feet and tongue would have reacted. This makes one to be unfit to work or produce quality work. This study reveals that, food allergies cause social and economic challenges because, it can lower one's academic progress which may lead one to get low paying jobs in future. Moreover, most part-time jobs pay only if one has worked hence, failure to receive income means inability to afford medical bills or buying healthy food that the system favours. This situation worsens if when originating from an economically disadvantaged family.

Finding an allergen may be a struggle that may lead one to miss classes or work and be required to produce medical certificates as evidence that they were sick. Food allergic participants indicated that the problem with this condition is that it is incurable so when seeking for help they already know the steps to follow – take the provided medication when they are sick and continued finding the cause of the symptoms as instructed by physicians. However, "one can refuse to accept one's illness despite the doctor's recommendations" (Kasl and Cobb, 1966:249). I remember when I was working; the admin never believed that I would be sick for only one or two days especially that I looked very healthy when I was resuming work. This is because allergy symptoms such as swelling of eyes or tongue can disappear within 48 hours and it only takes a closer look for one to notice the difference when the symptoms disappear.

Marxian theory argues that, those that own the means of production care less about the health and well-being of their employees. Instead what is important for them is the

motive of profit for their companies and this entails minimizing expenditures on health facilities/resource/allocations to workers (DuunGalvin et al., 2006:1341). Food allergies should not be viewed as acute diseases because this is a chronic condition, individuals may take a longer period to find the allergen and may accidentally eat offending food and react to it. In the process of finding the allergen, such individuals should request a medical certificate that cover for at least 3 - 6 months, attend work when they are fit and be substituted when they ill because health seeking behaviours are negatively influenced by social role expectations.

The health seeking behaviours of food allergic participants involved the change of their social roles and responding to socio-psychological pressures. Talcott Parson (1951) a functionalist theorist argued that, sickness is dysfunctional because it threatens the stability of the social system or permits an individual to be deviant by avoiding societal expectations and responsibilities (Lubkin and Larsen, 2006:24). In seeking help the food allergic participants had to abide to societal roles of being sick, proved that they are ill and willing to be well by consulting health practitioners whom the society state as experts in defining illness and determining who is "really" sick (Lubkin and Larsen, 2006:24). In search of the causes and remedies of pathological signs and symptoms, social and cultural factors influenced individuals because there are distinct cultural concepts of how an illness is interpreted and how sick individuals should behave (Lubkin and Larsen, 2006).

4.9.2 Self-management of food allergies

All the food allergic participants highlighted the absence of the cure and this makes allergies a chronic condition that needs to be managed rather than healed. In the literature I discussed that, when talking about young adults with chronic conditions it is important to use self-management or self-regulation perspective to understand how food allergies are managed as they require self-care (Lansing and Berg, 2014). In this study, individuals indicated that their families and friends influenced their health seeking behaviours as discussed earlier in this chapter. Moreover, respondents stated that sometimes they experienced allergy reactions because of their family members or

friends. For example, in Sihle's case her brothers served her with fish tinned food while knowing that she is allergic to it. Most participants noted that when eating out with friends they engaged in 'risk-taking behaviours' by ingesting the allergen and took medication before or soon after eating. This shows that the health seeking behaviours of food allergic people must be understood within the social-environmental context.

4.9.3 Diverse ways of coping with food allergies

When an allergen was identified the food allergic participants used self-management approach to cope with this chronic condition. Different coping mechanisms used include, reading of the food ingredients carefully, preparing their own food, avoiding eating out or excessive intake of alcohol. They also avoided entering precarious or unfamiliar restaurants or and to try using new ingredients or recipes of cooking.

Kyra stated that she usually do physical exercises to cope with stress caused by food allergies. **Fig. 2** illustrates religion as one of the methods used to cope with this illness as some engaged in prayers. Functionalist theorists like Parsons state that religion serves a function to the cultural, social and personality systems (Mews, 2011). When one faces evil, religion becomes a compensatory mechanism for motivation and coping with stress (Aldridge, 2007). One national survey in America found that, seven in ten of these individuals considered the use of prayer for health outcomes as very helpful (Weiss and Lonnquist, 2017:304). For example, it helped them to cope better with the illness, to lower the blood pressure and some physicians acknowledged that the action of committing to religious beliefs has positive effect on physical health but they were unclear about the extent that they should be involved in such discussions with patients. It is essential to consider the social or religious background of individuals when trying to understand the health seeking behaviours because these are vital in coping with the illness and stress.

4.10 Conclusion

This chapter answers the research question of, "What are health seeking behaviours of university students, women and men (18-35 years old) with food allergies?" and the sub-questions of, "What are the social and cultural factors that influence people's behaviours in seeking treatment when they start noticing allergy symptoms and why food allergic individuals chose specific healing systems or treatment measures?". In summary, when trying to understand the health seeking behaviours of food allergic individuals the health care practitioners should consider the sociology of diagnosis as this approach describes how individuals in the milieu of the sick also diagnose and possibly treat illnesses before or after consulting the primary health care. It is essential to understand that the social and cultural factors influence the interpretation of illness and that the method of treatment may differ with that of the biomedical model of health. In this study, food allergic individuals consulted their families, peers, neighbours, herbalists, indigenous healers and health websites regarding this condition and some followed the treatment methods advised.

Failures of the biomedicine to cure food allergies contribute to (mis)interpretations of allergy symptoms. Examples of cultural and religious explanations include defining allergy as other diseases like HIV or caused by spiritual attacks, weather changes, premature birth, and the failure to follow cultural norms. These beliefs caused some to use specific remedies such as natural or traditional herbs from traditional healers and to choose faith based healing systems and the use anointed materials. The other factors that were suspected to be causing strange symptoms include too much consumption of same type of foods and introduction of GMOs.

The biomedical model of health currently has no cure for food allergies and the allergy tests are expensive and inaccurate as they sometimes fail to pick the allergen or identify the food that one is not allergic to. This causes the less privileged and those whose allergy tests did not pick the allergen to use food elimination method till the allergen is identified. The socioeconomic status of individuals or their family background, the failure of the primary health care systems to explain the causes of symptoms or to provide

treatment for food allergies has an impact on the health seeking behaviours of individuals. In this study treatment failure led to poor patient-doctor relationship, non-adherence to treatment and continuous illness while trying to find the cause of the severe symptoms.

This study revealed that although in South Africa individuals may easily access public health care services; there are lack of essential resources such as allergy specialists, allergy-testing apparatus and effective medications. This makes the experiences of food allergies differ between the poor and the rich as explained by the Marxist theorist. However, in finding and avoiding the allergen this study revealed that the experiences of the better-off and the less privileged are more or less the same because, they all use the elimination diet method. Moreover, all the health systems show that food elimination method is a single and effective way to identify and prevent the allergen. Out of eleven food allergic participants, only one indicated that she was completely healed from fish allergy.

In trying to fit into social groups and trying to avoid many questions, all participants experienced changes in social relations because most social gatherings revolve around food and their friends pressured them to eat 'all' food. As a result, some became risk-takers, ate the offending food and took allergy medication before or soon after ingestion. However some did not deliberately expose themselves to the allergen, for example, one inhaled and reacted to the allergen at work and one ate the offending food due to lack of choices or access to other types of food. The diagnosis of food allergies should consider the social environment of the affected because most factors presented has an impact on the health seeking behaviours of those with this condition.

The (mis)interpretations of allergy symptoms by community members show that food allergies are still not understood in some parts of the South African communities. In the study, the food allergic participants were labelled or faced discrimination as they tried to explain their conditions and when they avoided eating out. The labelling theory explains that isolation occur when one deviates from the societal or group norms. Eating together is a sign of unity or togetherness hence avoiding sharing food leads to isolation. Food allergy is a life threatening condition that causes difficulties in dating, academic and

work progress also deteriorates which eventually affect their socio-economic status and led to other health conditions such as stress.

In coping with this condition, different mechanisms were used such as doing physical exercises, practicing religious rituals such as prayers, explaining their chronic condition to friends, reading carefully the food labels, asking what was included in the meal preparation and avoiding precarious environments such as restaurants.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a conclusion to the study by providing a summary of what was discussed in each chapter. In the discussion I will show if the purpose or objectives of the study were achieved.

This study aimed to find the health seeking behaviours of young people with food allergies, how the social and cultural factors influenced them as they were searching for the causes of strange or severe symptoms and treatment, and the reason for choosing specific health system or treatment measures. I presented my personal experiences of food allergies showing how this condition is a life threatening condition and worth study. I discussed that food allergies are perceived as rare in Africa and that few studies have looked at how individuals' health seeking behaviours are influenced by their friends, family and community as explained by social learning theory that, learning is only social. Moreover, I discussed that there are few studies conducted on food allergies by someone who has this condition and that focus on university students who are possibly staying alone, starting to prepare their own meals who are also transitioning to adulthood and facing lot of challenges to resist eating out with peers as they try to fit into identity groups formed in such settings. This study aimed to fulfil this gap by using a qualitative research study; I used my personal experiences or auto-ethnography method as the basis of the study and interviewed Wits students or shared our experiences of food allergy as young Africans. These data collection methods were chosen because they were proven to be effective and relevant for this research although there are some limitations. I considered all relevant ethical issues. Moreover, in achieving these objectives, relevant literature on food allergies and health seeking behaviours was consulted before conducting the study and in presenting the data collected.

Literature revealed the medical definition of food allergies is an abnormal immune response after ingestion of food that is perceived as "unsafe". Food allergies may be hereditary and other causes may be due to globalisation of food, modification of food products, GMOs, change of diet and method of food preparation. Biomedicine currently has no cure for food allergies which make this condition a chronic one and the only way for one to live a healthy life is to adopt a self-management approach. Thus using the

elimination diet method to identify the allergen and finding ways of coping with the chronic condition. However, this method is a challenge when one lives with unsupportive family or friends as they may continuously expose them to the allergen. Moreover, while using the elimination diet approach one may delay to pick the allergen as the allergen may be included in different foods, for example sugar, spices or milk. The other challenge with elimination diet method is that some food products are poorly labelled causing individuals to continue experiencing allergy reaction even after identifying the allergen.

Literature shows that social definition of illness may be constructed in relation to "cultural illness" that is culturally framed understanding of the causes of illness. In the case studied this is linked to curses from God or ancestors or witchcraft. Sociology of diagnosis as an approach also explains that diagnosis is no longer a private matter but publicly contested and this involves all the actors in one's environment, those inside and outside the medical examination room. This study revealed that, in some communities eyes rashes are believed to be caused by depriving a pregnant woman what she who have asked for. Additionally, some were told that being diagnosed as food allergic means there were born prematurely but all these are socio-cultural beliefs. Moreover, food allergic participants indicated different socio-environmental factors influenced their health seeking behaviours as pointed by the social learning theory. Behaviours are learned or influenced by one's immediate environment. For example, some food allergic respondents received advice from friends, kin and those with similar experiences while some used the information from the media. The cultural beliefs and practices, gender role expectations, individual's socio-economic status and the biomedicine's failure to provide cure for this condition also influenced the behaviour of food allergic participants in this study.

There are gender differences when; seeking causes for body reactions, taking treatment and when coping with a chronic condition. Although most participants were women they showed more concern and worries about their health conditions and used plural health approaches. For example, they used both conventional medicines with other non-

professional health care systems while men used only one method of treatment or preferred to heal naturally.

Other social remedies used to treat allergy reactions include natural herbs from herbalists, anointed water and cloths from prophets. Prophets were consulted with the belief that the illness was a demonic or spiritual attack that can only be healed by God and some used traditional medicine from traditional healers. The functionalist theorists assert that religion is a useful element that brings hope and peace to individuals and the society at large. This was shown in this study as most participants engaged in prayers and one respondent received healing through prayer.

Other studies with physicians show some believe that natural herbs are effective to treat food allergies and that faith based healing systems can heal chronic diseases or conditions that they would have failed. In the literature it was discussed that individuals prefer alternative systems because they share certain social and cultural backgrounds with the healers, easily understood and given more time to consult when compared to the primary health care system. Sociology of diagnosis is an approach that physicians should use in order to understand food allergies from the lay perspective and use a holistic approach to treat and promote health of individuals. In order to obtain effective health outcomes, there should be better patient-doctor relationship. The health professionals should not only use their power and knowledge as explained by functionalist theorist but critically engage or openly discuss about the illness with patients.

I found that as much as the sociology of diagnosis is an important approach to understand health seeking behaviours, it has its shortcomings. For example, it does not explain the relationship between economic status and health seeking behaviours. This research adds to the existing literature that, economic factors trigger different explanations to what causes food allergy reactions. For example, failure to do allergy tests caused individuals to continue searching the reasons why their bodies reacted and they received diverse answers because South Africa has diversity of cultures. Hence, the explanations of what causes food allergies and the health seeking behaviours were influenced by economic factors and dependent on social context.

Future studies on youths and food allergies may look at reasons why peers pressure their food allergic friends to take risk and ingest offending food when it negatively affects their health. Moreover, health programmes educating about food allergies should be implemented in communities so as to create safe environment for those living with the condition.

Bibliography

Ackroyd, S., 1992. *Data collection in context*. London: Longman Group United Kingdom.

Adhikari, D. and Rijal, D.P., 2014. Factors affecting health seeking behavior of senior citizens of Dharan. *Journal of Nobel Medical College*, *3*(1), 50-57.

Ahn, K., 2011. Food allergy: diagnosis and management. *Korean Journal of Asthma, Allergy and Clinical Immunology*, *31*(3), 163-169.

Alden, C. and Anseeuw, W., 2009. *Land, liberation and compromise in Southern Africa*. USA: Springer.

Aldridge, A., 2007. *Religion in the contemporary world*. London: Polity.

Alston, M. and Bowles, W., 2003. *Research for social workers: An introduction to methods*. London: Psychology Press.

Alvarez, C., 2013. *Social Consequences of Food Allergy*. Available from: file:///E:/masters/stigma.html (Accessed 23 March 2017).

Amzat, J. and Razum, O., 2014. *Medical Sociology in Africa*. London, Springer.

Andrews, M., 2004. *The Uses of Narrative: Explorations in Sociology, Psychology, and Cultural Studies*. USA: Transaction Publishers.

Armstrong, A.M., MacDonald, A., Booth, I.W., Platts, R.G., Knibb, R.C. and Booth, D.A., 2000. Errors in memory for dietary intake and their reduction. *Applied Cognitive Psychology*, *14*(2), 183-191.

Bengt, B., 2005. Genetic and environmental risk factors for the development of food allergy. *Current opinion in allergy and clinical immunology*, *5*(3), 249-253.

Black, K., 2009. *Business statistics: Contemporary decision making.* USA: John Wiley & Sons.

Bowden, J., 2017. *Allergies and Food Intolerances on Flights – How Do Airlines React?* Available from: https://www.theguardian.com/travel/2017/apr/24/nut-allergy-food-intolerance-airline-policy (Accessed 23 April 23 2017).

Bowen, G.A., 2008. Naturalistic inquiry and the saturation concept: a research note. *Qualitative research*, *8*(1), 137-152.

Brown, J., 2007. *Nutrition Now.* USA: Cengage Learning.

Cawthorn, D.M., Steinman, H.A. and Hoffman, L.C., 2013. A high incidence of species substitution and mislabelling detected in meat products sold in South Africa. *Food Control*, *32*(2), 440-449.

Chuang, D., 2009. Ed. *Asian American Youth Ministry.* USA: Lulu. com.

Cline, R.J. and Haynes, K.M., 2001. Consumer health information seeking on the Internet: the state of the art. *Health education research*, *16*(6), 671-692.

Coleman, C.H., Menikoff, J.A., Goldner, J.A. and Dubler, N.N., 2005. The Ethics and Regulation of Research with Human Subjects: Teacher's Manual. Available from: https://repository.library.georgetown.edu/handle/10822/547954 (Accessed 25 June 2017).

Colson, D. and Holford, P., 2012. *Optimum Nutrition for Your Child: How to Boost Your Child's Health, Behaviour and IQ.* London: Health and Fitness,

Conrad, P. and Schneider, J.W., 2010. *Deviance and medicalization: From badness to sickness.* USA: Temple University Press.

Conrad, P., Bandini, J. and Vasquez, A., 2016. Illness and the Internet: from Private to Public Experience. *Health, 20*(1), 22-32.

Corbin, J. and Strauss, A., 2015. *Basics of qualitative research techniques and procedures for developing grounded theory.* 4th ed. Los Angeles: Sage Publications.

Cottencin, A., Mullet, E. and Sorum, P. C., 2006. Consulting a complementary and alternative medical practitioner: a systematic inventory of motives among French patients. *Journal of Alternative & Complementary Medicine, 12*(8), 791-798.

Coulson, N.S. and Knibb, R.C., 2007. Coping with Food Allergy: Exploring the Role of the Online Support Group. *Cyberpsychology & Behavior,* 10(1), pp.150-186.

Counihan, C. and Van Esterik, P., 2013. *Food and Culture.* 3rd ed. New York: Routledge.

David, M. and Sutton, C. D., 2011. *Social research: An introduction.* 2nd ed. London, Sage Publication.

Dean, J., Fenton, N.E., Shannon, S., Elliott, S.J. and Clarke, A., 2015). Disclosing food allergy status in schools: health-related stigma among school children in Ontario. *Health and Health Care*, 24(5), 3–52.

Denzin, N. K., 2008. *Collecting and interpreting qualitative materials* (Vol. 3). London: Sage Publication.

du Plessis, H., 2014. *Majority of SA's Seafood Exported. League of Legends News*, 28 November Available from http://www.iol.co.za/news/south-africa/western-cape/majority-of-sas-seafood-exported-1788194 (Accessed 17 March 2017).

DuunGalvin, P.S., Hourihane, T.S, Frewer, P., Knibb, L.S., Elberink, P. & Klinge S.H., 2006. Incorporating a Gender Dimension in Food Allergy Research: a review. Allergy, 2(1), 1335-1343.

Eigenmann, P.A. and Zamora, S.A., 2002. An internet-based survey on the circumstances of food-induced reactions following the diagnosis of IgE-mediated food allergy. *Allergy*, *57*(5), 449-453.

Ellis, C., 2004. *The ethnographic I: A methodological novel about Autoethnography.* Walnut Creek: Rowman Altamira.

Ellis, C., Adams, T.E. and Bochner, A.P., 2011. Autoethnography: an overview. *Historical Social Research/Historische Sozialforschung*, 273-290.

Fainzang, S. and Haxaire, C. eds., 2011. *Of Bodies and Symptoms: Anthropological Perspectives on their Social and Medical Treatment.* 4th ed. Spain: Publicacions Universitat Rovira.

George, A., Oluwatobi, O.S and Joseph, B., 2017. *Holistic Healthcare: Possibilities and Challenges.* USA: CRC Press.

Gilbert, L., Selikow, T.A. and Walker, L., 2010. *Society, health and disease in a time of HIV/AIDS.* South Africa: Pan Macmillan.

Gilissen, L.J.W.J, Wichers, H.J. and Savelkoul, H.F.J., 2006. *Allergy Matters: New Approaches to Allergy and Management.* London: Springer Science & Business Media.

Goldberg, D.T., 1993. *Racist culture.* Cambridge, MA: Blackwell Publishers.

Goody, C.M. and Drago, L., 2010. *Cultural Food Practices.* USA: American Dietetic Association.

Gqaleni, N., Moodley, I., Kruger, H., Ntuli, A., and McLeod, H., 2007. Traditional and complementary medicine: health care delivery. *South African Health Review*, 2007(1), 175-188.

Gray, C. and Kung, S., 2012. Current Allergy & Clinical Immunology - Food allergy in South Africa: joining the food allergy epidemic? *Current Allergy & Clinical Immunology,* 25(1), 24 – 29.

Gray, C. L., Goddard, E., Karabus, S., Kriel, M., Lang, A. C., Manjra, A. I. and Levin, M. E. 2015. Epidemiology of IgE-mediated Food Allergy. *SAMJ: South African Medical Journal*, *105*(1), 68-69.

Groleau, D., Young, A. and Kirmayer, L.J., 2006. The McGill Illness Narrative Interview (MINI): An Interview Schedule to Elicit Meanings and Modes of Reasoning Related to Illness Experience. *Transcultural Psychiatry*, 43(4): 671–691.

Ha, J. F. and Longnecker, N., 2010. Doctor-patient communication: a review. *The Ochsner Journal*, *10*(1), 38-43.

Hadley, C., 2006. Food Allergies on the Rise? Determining the Prevalence of Food Allergies, and How Quickly it is Increasing, is the First Step in Tackling the Problem. *EMBO reports,* 7(11), 1080-1083.

Haralambos, M., and Hilborn, M, 1999. *Sociological Slovenian literature starting points and methods.* London: Sage Publication.

Harris, B., Goudge, J., Ataguba, J. E., McIntyre, D., Nxumalo, N., Jikwana, S., & Chersich, M., 2011. Inequities in access to health care in South Africa. *Journal of public health policy*, *32*(1), S102-S123.

Hawtin, M. and Percy-Smith, J., 2007. *Community profiling: A practical guide: Auditing social needs*. London: McGraw-Hill Education.

Lyons, A. C., and Forde, E. M., 2004. Food allergy in young adults: perceptions and psychological effects. *Journal of Health Psychology*, *9*(4), 497-504.

Hasnain, G.M., Akter, M., Sharafat, M.S.I. and Mahmuda, A., 2014. Morbidity Patterns, Nutritional Status, and Healthcare-seeking Behavior of Female Garment Workers in Bangladesh. *Electron Physician,* 6(2), 801–807.

Helman, C.G., 2001. *Culture, Health and Illness.* London: Sage Publications.

Hershock, P.D., Stepaniants, M. and Ames, R.T., 2003. *Technology and Cultural Values: On the Edge of the Third Millennium.* USA: University of Hawaii Press.

Hiatt, J, F., 1986. Spirituality, Medicine and Healing. *Southern Medical Journal,* 4 (79), 736-743.

Holland, K. and Jarvis, S., 2007. Children's Health for Dummies. USA: John Wiley & Sons.

Hong, X., Tsai, H. J. and Wang, X., 2009. Genetics of food allergy. *Current opinion in pediatrics*, *21*(6), 770

Hundt, G.L, Stuttaford, M and Ngoma, B., 2002. The social diagnostics of stroke-like symptoms: healers, doctors and prophets in Agincourt, Limpopo Province, South Africa, *J Biosoc. Sci,* 36(2) 433–443.

Hundt, G.L., Stuttaford, M. and Ngoma, B., 2002. The Social Diagnostics of Stroke-like Symptoms: Healers, Doctors and Prophets in Agincourt, Limpopo Province, South Africa. *Journal of Biosocial Science,* 36(2) 433–443.

Jedrychowski, L. and Wichers, J.W., 2009. *Chemical and Biological Properties of Food Allergens*. USA: CRC Press.

John, L. J., Ahmed, S., Anjum, F., Kebab, M., Mohammed, N., Darwich, H. and Sreedharan, J., 2014. Prevalence of allergies among university students: a study from Ajman, United Arab Emirates. *ISRN allergy*, *2014.*

Jutel, A. G. and Conrad, P., 2014. *Putting a name to it: Diagnosis in contemporary society.* USA: JHU Press.

Kasl, S. V. and Cobb, S., 1966. Health behavior, illness behavior and sick role behavior: I. Health and illness behavior. *Archives of Environmental Health: An International Journal*, *12*(2), 246-266

Katon, W., 1989. Fears, Phobias, and Rituals: Panic, Anxiety, and Their Disorders. *The Journal of Nervous and Mental Disease*, *177*(6), 375.

Kung, S.J., Steenhoff, A.P. and Gray, C., 2014. Food Allergy in Africa: Myth or Reality? *Clinic Rev Allerg Immunol*, 46(3), 241-249.

Kvale, S., 1996. *Interviews: An Introduction to Qualitative Research Interviewing*. CA: Sage, Thousand Oaks.

Lacey, A. and Luff, D., 2001. *Trent focus for research and development in primary health care*. Trent University: Trent Focus Group.

Lansing, A.H. and Berg, C.A., 2014. Topical review: Adolescent self-regulation as a foundation for chronic illness self-management. *Journal of pediatric psychology*, *39*(10), 1091-1096.

Laslett, B., 1999. Personal Narratives as Sociology. *Contemporary Sociology*, 28(4), 391-401.

Liem, J. J., Kozyrskyj, A. L., Huq, S. I. and Becker, A. B., 2007. The risk of developing food allergy in premature or low-birth-weight children. *Journal of Allergy and Clinical Immunology*, *119*(5), 1203-1209.

Lubkin, I. M. and Larsen, P. D., 2006. *Chronic illness: Impact and interventions*. USA: Jones & Bartlett Learning.

Lupton, D., 2012. *Medicine as culture: illness, disease and the body*. London: Sage Publications.

Lupton, D., (2012). *Power relations and the medical encounters. In Medicine as culture.*

London: Sage Publications.

Mahmood, S. S., Iqbal, M., Hanifi, S. M. A., Wahed, T. and Bhuiya, A., 2010. Are 'Village Doctors' in Bangladesh a curse or a blessing?. *BMC international health and human rights*, *10*(1), 1-10.

Malterre, T. and Segersten, A., 2015. *The Elimination Diet: Discover the Foods that are Making You Sick and Tired--and Feel Better Fast*. London: Hachette UK.

Mayosi M, Lawn J.E., Van Niekerk A, Brandshaw D., Abdool S.S. and Coovadia H.M., 2012. Health in South Africa: changes and challenges since 2009. *The Lancet,* 1(2), 3680.

Mbatha, N., Street, R.A., Ngcobo, M. and Gqaleni, N., 2012. Issues in Medicine: Sick Certificates Issued by South African Traditional Health Practitioners: Current Legislation, Challenges and the Way Forward. *The South African Medical Journal*, 102(2), 115-153.

McCormack, B. and Hill, E., 1997. *Conducting a Survey: The SPSS Workbook.* London: Cengage Learning EMEA.

McGann, P.J., Huston, D.J. and Rothman, B.K., 2011. *Sociology of Diagnosis.* London: Emerald Group Publishing.

Mews, S., 2011. Religion in the social theories of Talcott Parsons. *Religion*, 5(1), 69-77.

Minaker, L.M., Elliott, S.J. and Clarke, A. (2015). Low income, High Risk: the Overlapping Stigmas of Food Allergy and Poverty. *Critical Public Health*, 25(5), 599-614.

Moore, R. and McClean, S., 2010. Folk Healing and Health Care Practices in Britain and Ireland: Stethoscopes, Wands and Crystals. Berghahn: Oxford.

Mullins, R.J, Clark, S. and Camargo, C.A., 2010. Socio-economic Status, Geographic Remoteness and Childhood Food Allergy and Anaphylaxis in Australia Authors. *Clinical & Experimental Allergy,* 40(10), 1523-1532.

Murray, M.T. and Pizzorno, J., 2012. *The Encyclopedia of Natural Medicine*. 3rd ed. New York: Simon and Schuster.

Nettleton, S. 2006. 'I just want permission to be ill': Towards a Sociology of Medically Unexplained Symptoms. *Social Science & Medicine*, *62*(5), 1167-1178.

Nettleton, S., Woods, B., Burrows, R. and Kerr, A., 2010. Experiencing food allergy and food intolerance: An analysis of lay accounts. *Sociology*, *44*(2), 289-305.

Neuman, L., 2000. *Social Research methods: Qualitative and Quantitative Approaches*, (4th Edition). USA: Allyn & Bacon.

Nichols-English, G., and Poirier, S., 2000. Optimizing adherence to pharmaceutical care plans. *JAPHA-WASHINGTON, 40*(4), 475-475.

Nwankwo, S. and Aiyeku, J.F., 2002. *Dynamics of Marketing in African Nations*. London: Greenwood Publishing Group.

Ortolani, C. and Pastorello, E. A., 2006. Food allergies and food intolerances. *Best Practice & Research Clinical Gastroenterology*, *20*(3), 467-483.

Peltzer, K., 2009. Utilization and practice of traditional/complementary/alternative medicine (TM/CAM) in South Africa. *African Journal of Traditional, Complementary, and Alternative Medicines*, 6(2), 175.

Petzer, K. and Mngqundaniso, N., 2008. Patients consulting traditional health practioners in the context of HIV/AIDS in urban areas in KwaZulu-Natal, South Africa. *African Journal of Traditional, Complementary and Alternative Medicines*, *5*(4), 370-379.

Petti, C. A., Polage, C. R., Quinn, T. C., Ronald, A. R. and Sande, M. A., 2006. Laboratory medicine in Africa: a barrier to effective health care. *Clinical Infectious Diseases*, *42*(3), 377-382.

Race, S., 2012. *Change your diet and change your life: food intolerance and food allergy handbook*. London: Sharla Race.

Rasheed, E., 2013. BTEC First Health and Social Care Level 2 Assessment Guide: Unit 4 Social Influences on Health and Wellbeing. London: Hachette.

Richer, A.C., 2009. Food Allergies. California: ABC-CLIO.

Robert, T.E., 1991. *Modern Medicine of South Africa*. South Africa: Johannesburg Publication.

Rubin, A. and Babbie, E., 2009. Essential research methods for social work. London: Cengage Learning.

Sampson, H.A., 2003. Food allergy. *Journal of Allergy and Clinical Immunology*, *111*(2), 540-S547.

Sanders, T.A.B., 1999. Food Production and Food Safety. *BMJ : British Medical Journal,* 318(1), 1689-1694.

Shaikh, B. T., 2008. Understanding social determinants of health seeking behaviours, providing a rational framework for health policy and systems development. *JPMA. The Journal of the Pakistan Medical Association*, *58*(1), 33.

Shapiro, G. K. and Shapiro, C. M., 2010. Factors that influence CPAP adherence: an overview. *Sleep and Breathing*, *14*(4), 323-335.

Shek, L. P. C., Cabrera-Morales, E. A., Soh, S. E., Gerez, I., Ng, P. Z., Yi, F. C. and Lee, B. W. (2010). A population-based questionnaire survey on the prevalence of peanut, tree nut, and shellfish allergy in 2 Asian populations. *Journal of Allergy and Clinical Immunology*, *126*(2), 324-331.

Shepherd, N. and Robins, S.L. eds., 2008. *New South African Keywords*. USA: Ohio University Press.

Shreffler, W., Yuan, Q. and Asp, K., 2012. *Understanding Your Food Allergies and Intolerances: A Guide to Management and Treatment.* New York: Martin's Press.

Sibanda, A., Zuberi, T. and Udjo, E.O., 2005. *The Demography of South Africa*. Ney York: ME Sharpe.

Sicherer, S.H., 2016. *Food Allergy: Practical Diagnosis and Management*. USA: CRC Press.

Siegel, LJ. 2005. *Criminology: Theories, Patterns, and Typologies.* Canada: Thomson Wadsworth.

Spangler, A., 2010. When You Need a Miracle: Daily Readings. London: Zondervan.

Sparkes, A.C., 2000. Autoethnography and Narratives of Self: Reflections on Criteria in Action. *Sociology of Sport Journal*, 17(1), 21-43.

Sutton, D. E., 2010. Food and the Senses. *Annual Review of Anthropology*, 39(1), 209-223.

Sylvia, O., 2000. Disease Aetiology in Traditional African Society. *Istituto Italiano per l'Africa e l'Oriente,* 55(4), 583-590.

Taber, J.M., Leyva, B. and Persoskie, A., 2015. Why do people avoid medical care? A qualitative study using national data. *Journal of general internal medicine*, *30*(3), 290-297.

Taylor, M., 2002. Food Allergy Survivors Together Handbook. USA: .iUniverse.

Teitel, M. and Wilson, K. A., 2001. *Genetically engineered food: Changing the nature of nature*. USA: Inner Traditions/Bear & Company.

Tongco, M, D, C., 2007. *Purposive Sampling as a Tool for Informant Selection, Ethno botany Research & Applications*. Available from: http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/227/l1547-3465-05-147.pdf (Accessed 22 May 2017).

Waggoner M.R., 2013. Parsing the Peanut Panic: the Social Life of a Contested Food Allergy Epidemic. *Social Science & Medicine*, 90(1), 49–55.

Wahn, H. U. and Sampson, H. A., eds., 2015. *Allergy, Immunity and Tolerance in Early Childhood: The First Steps of the Atopic March*. London: Academic Press.

Wall, S., 2008. Easier said than done: Writing an autoethnography. *International Journal of Qualitative Methods*, *7*(1), 38-53.

Wang, C.C. and Geale, S.K., 2015. The Power of Story: Narrative Inquiry as a Methodology in Nursing Research. International Journal of Nursing Sciences, 2(1), 195-198.

Weiss, G. L. and Lonnquist, L. E., 2017. The sociology of health, healing and illness. London: Taylor & Francis.

Wiley, A.S. and Allen, J.S., 2012. *Medical Anthropology: A Biocultural Approach.* 2nd ed.. New York, Oxford University Press.

Woivalin, T., Krantz, G., Mäntyranta, T. and Ringsberg, K. C., 2004. Medically unexplained symptoms: perceptions of physicians in primary health care. *Family Practice*, *21*(2), 199-203.

Wood, R.A., 2011. *Food Allergies for Dummies.* John Wiley & Sons, Canada.

Woolworths., 2017. *GMOs in South Africa.* Available from: http://www.woolworths.co.za/store/fragments/corporate/corporateindex.jsp?content=corporate-content&contentId=cmp202256 (Accessed 27 May 2017).

World Health Organization., 2002. *WHO traditional medicine strategy 2002-2005.* Available from: http://www.wpro.who.int/health_technology/book_who_traditional_medicine_strategy_2002_2005.pdf (Accessed 20 November 2017).

World Health Organisation International Food Safety Authorities Network (INFOSAN)., 2006. *"INFOSAN Information Note No. 3/2006: Food Allergies".* Available from: http://www.who.int/foodsafety (Accessed 21 May 2017).

Xueqin, G., 1999. Between Two Worlds: The Use of Traditional and Western Health Services By Chinese Immigrants. *Journal of Community Health*, 24(6), 312-523.

APPENDIX

school of SOCIAL SCIENCES

SOSS Human Research Ethics Committee

Clearance Certificate

Protocol Number:	**SOC170802**
Project Title:	**'The health seeking behaviours of people with food allergies'**
Investigator's Name:	**Miss Jelika Gumbo**
Department:	**Sociology**
Date Reviewed:	**04 December 2017**
Decision of Committee:	**Approved / Unconditionally**
Expiry Date:	**04 December 2019**
Date:	**05 December 2017**
Head of School	**Professor Mucha Musemwa**
CC supervisor:	**Professor Lorena Nunez Carrasco**

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG 2017 -12- 05

Declaration of Investigator

To be completed in duplicate and one copy to be returned to Ms. Sarah Mfupa in the School of Social Sciences, Room 152, 1st Floor, Robert Sobukwe Block.

I fully understand the conditions under which I am authorised to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. If any departure from the research procedure as approved, I undertake to resubmit the protocol to the committee.

Student Signature 05/09/2018 **Date**

APPENDIX

Participant Information Sheet

Good day.

My name is Jelika Gumbo and I am a student registered for Masters in Health Sociology at the University of Witwatersrand. As part of the requirements for the degree, I am conducting a research study to inquire into The Health Seeking Behaviours of People with Food Allergies. It is hoped that this information may enhance the understanding how socio-cultural factors influence the health seeking behaviours of food allergic individuals.

I therefore wish to invite you to participate in my study. Please note that your participation in this study is voluntary and there is no reward for participating or penalty for not participating. Involvement in the study requires your participation n in an interview for approximately 45 minutes which will be scheduled at a time and place that is suitable for you. You will not be obliged to answer any questions with which you are uncomfortable and therefore have the option to decline or to respond to any questions asked. You will also have the option of terminating your participation at any stage that you choose.

I will take down some notes during the interview process. If you give me permission I will also tape record the interview. The data that will be collected through the interview will be treated within the strictest confidentiality. The interview notes and tapes will be kept until the researcher's results are released.

Please feel free to ask questions regarding the study. I shall answer them to the best of my ability. I may be contacted on email jelikasgum@gmail.com or mobile +27 84 649 6412. If you feel that any of your rights have been infringed upon, or if you need any clarification concerning the project, please contact Professor Lorena Nunez Carrasco from the University of the Witwatersrand on the email lorena.nunezcarrasco@wits.ac.za. The research report together with these contacts

will be published online in case if you wish to communicate or withdraw at a later stage. Should you wish to receive a summary of the results of the study an abstract will be made available.

Thank you for taking time to consider participating in the study.

Yours sincerely

Jelika Gumbo

APPENDIX

CONSENT FORM (INTERVIEW)

I, _____, consent to be interviewed by Jelika Gumbo for her research project. I understand that my participation in this study is voluntary, with no direct benefit and that there are not likely to be any risks involved. I understand that I am permitted to withdraw from the study at any time.

I have been given sufficient information about this research project. The purpose of my participation as an interviewee in this research has been explained to me and is clear.

I have been guaranteed that I will not be identified by my name.

I have read and understood the Participant Information Sheet; my questions about participation in this study have been answered satisfactorily.

Participant's Signature: Before interview

_____ Date:_____

Participant's Signature: After interview

_____ Date:_____

Appendix

Information about where each participant originated and when the food allergy began

Naledi originates from Eastern Cape in a Xhosa community. She stays with her family and does part-time job as a cashier at a restaurant. She was born allergic to wheat products but her parents noticed that at the age of three because that is when she began to eat these food products.

Like Naledi above, **Sihle** comes from Eastern Cape. She stays at student residence living on bursary pays and has a part-time job in a related field of study. She suffered from fish allergy from the age of 17.

Kyra originates from a community in Johannesburg. She stays with a family and does part-time job in the related field of study. She was born allergic to milk but her parents noticed that at the age of three when she began to eat ice creams and other dairy products. Kyra outgrew the allergy for a year or two between the ages of 13 or 14 but it returned when she was 15. At the age of 21, she developed sugar allergy and gluten intolerance at the age of 22.

Thembinkosi comes from a Zulu community in Johannesburg. He stays with a family and does part-time job in the related field of study. His family started noticing that he had a health condition at the age of four and noticed he was allergic to fish when it became severe at the age of 13.

Nozy is from a Ndebele community in Zimbabwe. She stays at student residence living on bursary pays. She suffered from fish allergy from the age of four but began to notice it at the age of 21 when she started cooking for herself or staying alone because the fish allergy became severe. At the age of 22 she developed spice food allergies and she thinks more food allergies are yet to be discovered because her body reacts to substances she has not identified yet.

Kayley comes from a Sotho community in Johannesburg. She stays with her parents who noticed that she was allergic to pork from the age of three. She also developed other food allergies at the age of 21 from the Brazil nuts and Bioplus - energy syrup that she used to take to keep awake when studying overnight.

Cara is Tswana by ethnic background from North-West province. She rents a room with other students outside university residences and does part-time job in the related field of study. She suffered from tinned food allergy from the age of 17.

Onesimo originates from a Zulu community in Cape Town. She stays with a family. She started experiencing fish allergy at the age of 17. She is no longer experiencing food allergies since she was 21 years old when a pastor prayed for her.

Tinotenda is Shona from Zimbabwe. She stays at a student residence living on bursary pays. She suffered from fish allergy from the age of 17.

Sean originates from a Tswana speaking community in Johannesburg. He stays at a student residence that his family pays for. He suffered from milk allergy from the age of 21.

Asande originates from a Coloured community in Cape Town. She rents a room outside university residences and does part time job in the related field of study. She suffered from vanilla food allergy from the age of 23.

Jayz (the researcher) originates from a Ndebele community in Zimbabwe. She stays with a family and started experiencing spice food allergy from the age of 23.

The table below shows what every participant is allergic to, the symptoms, the health care system used and the effectiveness of the treatment received.

APPENDIX

Fig. 2

What each participant is allergic to and health care system(s) consulted

Name	Allergen	Allergy Symptoms	Health System Used	Effectiveness of the Treatment Received
Kayley	Pork chops	Eczema with bruise	Pharmacy	No cure
	Brazil nuts	Swelling of the tongue, itchy & body rash	Pharmacy	No cure
	Bioplus	Swelling of the eyes	Biomedicine	No cure
Onesimo	Fish	Peeling skin on the neck, stomach & itchy	Self-medication	No cure
			Biomedicine	No cure
			Prayers (Christian)	Healed after 4 years
Naledi	Wheat	Eye rashes & itchy & sinus or blocked noses,	Biomedicine	No cure
Nozy	Fish & spices	Itchy skin & body rash on arms and thigs	Biomedicine &	No cure
			prayers (Christian)	No cure
Tinotenda	Fish	Dry rash on the face & neck,	Prayers (Christian)	No cure

		itchy & shortness of breath		
Sihle	Tinned food	Patches like fungus infection & irritation	Biomedicine &	No cure
			Self-medication	No cure
Cara	Tinned food	Itchy skin, swelling of the epiglottis, facial & shortness of breath	Biomedicine	No cure
Thembinkosi	Fish	Dry rash on the neck, shoulders, hands & chest, peeling of skin, itchy & sweating at night	Biomedicine	No cure
Sean	Milk	Diarrhea & itchy eyes	Self-treatment	No cure
Kyra	Milk	Diarrhea, Eczema under eyes, itchy & swelling of the body organs	Biomedicine	No cure
			Herbalist &	No cure
			Prayers (Christian)	No cure
	Sugar	open wounds on the head & other parts of the body		
Asande	Vanilla	ringworm infection & itchy	Biomedicine	No cure
			Traditional	No cure

APPENDIX

		skin	healing methods	
			Prayers (Christian)	No cure
Jayz (Researcher)	Spices	Diarrhea, swelling of the eyes, epiglottis, tongue, mouth hands, arms, buttocks, feet, ankles and itchy	Biomedicine	No cure
			Prayers (Christian)	No cure

APPENDIX

Fig. 4

Summary of other family members with similar allergy experiences

Name of the food allergic participant	Allergen & Symptoms	Family members with similar reaction	Allergen & Symptoms
Sihle	Tinned-food > Patches like fungus infection & irritation	Lihle – elder brother	Tinned-food > Patches like fungus infection & irritation
Thembinkosi	Fish > Dry rash on the neck, shoulders, hands & chest, peeling of skin, itchy & sweating at night	Mother (the late)	Fish > Dry rash on the neck and back.
Kayley	Pork chops > Eczema with bruise Brazil nuts > Swelling of the tongue, itchy & body rash Bioplus > Swelling of the eyes	<u>All family members</u> Mother being the most sensitive, father and a sibling	Pork > tonsils