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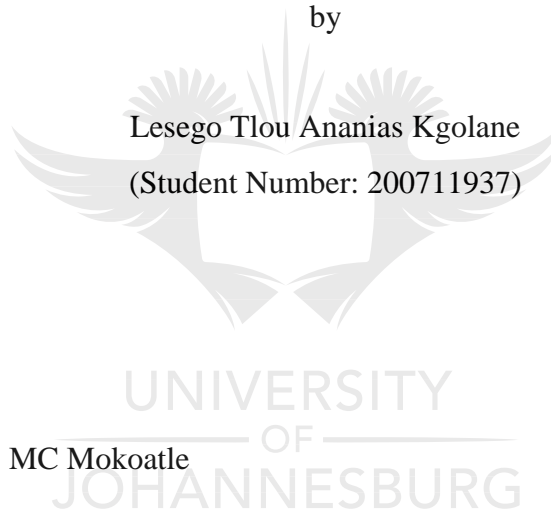
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**ASSESSING THE PRACTICES OF ENVIRONMENTAL
HEALTH PRACTITIONERS INSPECTING INFORMAL FOOD
TRADERS**

A dissertation submitted to the Faculty of Health Sciences, University of
Johannesburg, in fulfilment of the requirements for the degree of Master of
Technology in Environmental Health

by

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Johannesburg, 2020

DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the Degree of Master of Technology at the University of Johannesburg, Johannesburg. It has not been submitted before for any degree or examination at any other University.



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Eleventh day of February 2020

ABSTRACT

Informal food trading as a sector, has been established for centuries and is considered an integral part of the historical and cultural heritage of numerous cities on a global scale. Similar to many other countries, informal food trading has gained popularity for several reasons in South Africa. This growing interest goes beyond the safety of the food sold, consumer perspectives and rather includes the role of regulatory authorities such as Environmental Health Practitioners (EHPs). Such practitioners meant to ensure that informal food traders are inspected, trained and monitored in order to ensure the provision of safe and wholesome food to the public. However, the uniformity in the standard of inspection, certification, monitoring and statutory enforcement is questionable.

Using a quantitative method, the research followed a descriptive design to assess the practices of EHPs inspecting informal food traders within the City of Ekurhuleni Metropolitan Municipality (EMM). Purposeful sampling was used for selecting the sample population of 54 EHPs who conduct informal food trader inspections within their area of jurisdiction. In addition, through simple random sampling, records review of 80 informal food trader files was done. Data was collected through a previously validated self-reported questionnaire and data collection checklist. The questionnaire was completed by EHPs and the researcher simultaneously completed the checklist for review purposes.

The findings of the study indicated that there were gaps and challenges in the knowledge and practices of EHPs, particularly in the uniformity with which they execute their roles when inspecting informal food traders. The study also shows an existing record management system needing improvement. The value-add associated with the study is an indication of a need for upgraded knowledge management systems that include training, procedural standardisation and enhanced collaboration with other stakeholders for better inspection of informal food traders.

DEDICATION

This dissertation is dedicated to my grandparents (Solomon “Outata” and Hannie “Oumama” Lemotlo) who have since passed on, for their imprint of changing the lineage in our family history and introducing education as a strong pillar for success and contribution in society.

It is dedicated to my mother, Nxigivane Martha Lemotlo, who worked tirelessly as a single parent to ensure that the educational foundation laid as we grew up would let us be an important segment of society, even when times were tough, her belief in our abilities and her continued support in our dreams remains entrenched in our bloodstream to this day.

Furthermore, it is dedicated to my wife, Mrs. Ntombifuthi Joy Kgolane, for supporting and constantly being the thorn that would prick me into waking up to continue progressively and consistently during each stage of this research study. Your love, support, motivation, and contribution has been insurmountable.

To my Lord, and Saviour Jesus Christ for the positive plans you have always had for me, plans to prosper me, and to give me hope and a future as per Jeremiah 29 verse 11.

Finally, I dedicate this dissertation to the Environmental Health fraternity, may this contribution add to the value chain within society and lead the profession one step further towards excellence.

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ABBREVIATIONS

AFSUN	African Food Security Network
CAC	Codex Alimentarius Commission
CDC	Centres for Disease Control and Prevention
EHO	Environmental Health Officer
EHP	Environmental Health Practitioner
EMM	Ekurhuleni Metropolitan Municipality
ESDA	Eastern Service Delivery Area
FAO	Food and Agriculture Organization of the United Nations
FCD	Foodstuffs Cosmetics and Disinfectants Act
HPCSA	Health Professions Council of South Africa
IDZ	Industrial Development Zone
INFOSAN	International Food Safety Authorities Network
NDP	National Development Plan
NHA	National Health Act
NSDA	Northern Service Delivery Area
RSA	Republic of South Africa
SEHP	Senior Environmental Health Practitioner
SOP	Standard Operating Procedure
Stats SA	Statistics South Africa
SSDA	Southern Service Delivery Area
UJ	University of Johannesburg
WHO	World Health Organization

1. CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This chapter introduces the research study and explores the background to informal food trading as it relates to the knowledge and practices of Environmental Health Practitioners (EHPs). Considering the extent to which informal food trading contributes to economies on a worldwide scale, it becomes difficult to ignore the level of risk associated with this form of trade. Of more significance, however, is the level of control necessary to curb the food safety risks associated with informal food trading. That is where the role of Environmental Health Practitioners becomes key. This chapter further discusses this role locally and on a global scale, highlighting issues from a legislative and narrative perspective and will allude to the aim and objectives of the research study.

1.2 BACKGROUND TO THE STUDY

Many working people take their breakfast and lunch away from their homes (Hilario, 2015:605), thereby relying on food prepared by informal food traders to meet their energy needs (Alvarez & Cabuhal, 2010:238). Informal food trading refers to the trading, by informal food traders, of ready-to-eat foods and beverages sold in streets and other public places for immediate consumption (Bhattacharjya & Reang, 2014:747) or consumption at a later time without further processing or preparation (Skinner & Haysom, 2016:11), and is sold by itinerants or stationary vendors (Mensah, Aidoo & Teye, 2012:15).

Sampundo, Thanh, Khaferi & Devlieghere (2016:80) highlight that the informal food trading sector has experienced substantial growth during the past few decades as a result of socio-economic changes such as urbanisation and population growth, particularly in developing countries. As the population grows, global food demand also grows. With increasing income and urbanization, demand for food not only increases drastically but changes with shifts in consumption patterns and the springing up of different kinds of street food vendors (Food and Agriculture Organization, 2005:21). Table 1 below shows a compilation by the FAO of examples of different types of foods prepared by informal food traders.

Table 1: Foods Prepared by Informal Food Traders in African Countries

Country	Type of Food
Ghana	Fufu, kenkey, banku, waakye, akamu, jollof rice, moi-moi, agidi, koko, koose, boiled rice, gari, yam, palm nut soup, tomato stew
Zambia	Ntshima, chicken, beef, boiled/fried vegetables, smoked sausages, buka buka fish, offals, vegetables, mixed pounded ground nuts
Zimbabwe	Sadza, chicken, beef stew, boiled/fried vegetables, roasted beef, chicken, sausage, offal, boiled beans
South Africa	Maize porridge, chicken/beef, gravy salads
Kenya	Sausages, meat, fish, eggs, French fries, cereals, coffee, tea, porridge, root tubers, yams, cassavas, sweet potatoes, bananas
Malawi	Nsima, rice, sweet beer, meat, fish, eggs and vegetables
Benin, Togo, Senegal, Burkina Faso, Cote d'Ivoire	Cereal or tuber-based porridges (fermented or not), buttered bread, coffee, tea, bean purees, cowpea, cereal mixtures, maize-groundnut mixtures, pasta salads

(Source: WHO/INFOSAN, 2010)

As a result of this global exponential growth, the Foodstuffs and Agricultural Organization (FAO) made a call to increase the safety of food, sold by informal food traders, that encompasses all stages of the food production chain and subsequently, international guidelines have been put in place (Chukuezi1, 2010:50).

Informal food traders are recognised by South African legislation as food premises and are under the food control monitoring function of Environmental Health Practitioners (EHPs) as stated in the regulations defining the scope of practice of Environmental Health Practitioners, as amended (R698 of 2009). The monitoring includes, but is not limited to, licensing, certification and statutory enforcement for informal trade; sampling of foodstuffs sold by informal traders; and the carrying out of surveys in informal food trading enterprises for statistical purposes.

1.3 THE GLOBAL PERSPECTIVE OF INFORMAL FOOD TRADING

The growth in the size and complexity of urban areas has led to increased attention to the institutions, laws, and norms that govern informal food trading on an international scale (Shroder & Matuga, 2016:5). In the early years, there were questions raised regarding the viability, importance, and legitimacy of informal food trading, (Cross, 2000:35) but in recent times there has been various levels of government and state actors implicitly supporting degrees of informality and regulations (Kim, 2015 “&” Valenzuela, 2014:12). Campos, Gil, Mourao, Peixe & Antunes (2015:2) state that in some countries a significant proportion of the population of food consumed by the urban population representatively comes from the informal food trading sector. This expands to cross-border informal trading between two countries, which ultimately provides survival for the informal food trader (Garatidye, 2014:2).

This is seen as a result of informal food trading in many ways embodying the challenges of present-day urban governance and its evolving policy considerations (Carroll, Basinski & Morales, 2016:89).

In many cities, existing formal businesses call on government to curb informal food trading because they view these types of traders as unfair competitors who are not paying the same costs of doing business. At the same time, some advocates and practitioners in the international economic development community view informal food traders as legitimate informal sector micro-entrepreneurs who need support. Another view is that informal food trading can be seen as private capture of public space that involves significant costs (Roever, 2016:29).

In addition to its representing a violation of municipal codes, Ehrenfeucht (2016:15) asserts that informal food trader's presence in locations lacking an infrastructure intended for such business means it can be an impediment to traffic flow and contribute to congestion and other negative externalities, including pedestrian and consumer safety. These types of competing narratives have made informal food traders the focus of intense scrutiny, with governments and even administrations or departments within the same government, reaching different conclusions on their legitimacy and the appropriate level and manner of regulatory oversight.

Poor hygiene practices have often led to campaigns to remove informal food traders from public spaces, and the relationship between hygiene practices and informal food trading has been widely discussed in academic literature, with examples of case studies, including Togo (Adjrah, Soncy, Anani, Blewussi, Karou, Ameyapoh, de Souza & Gbeassor, 2013:67), India (Choudhury, Mahanta, Goswami, Mazumder & Pegoo, 2011:200), Uganda (Muyanja, Nayiga, Namugumya & Nasinyama, 2011:1553), Ghana (Rheinländer, Olsen, Bakang, Takyi, Konradsen, & Samuelsen, 2008:955), Latin America (Arámbulo III, Claudio, Juan & Albino, 1994:348) and South Africa (Von Holy & Makhoane, 2006:91).

Many of the studies reported a lack of basic hygiene knowledge amongst vendors coupled with poor hygiene practice (Adjrah et al., 2013:65 "&" Choudhury et al., 2011:201); a lack of adequate sanitation facilities leading to evidence of food contamination (Chakravarty & Canet, 1996:35 "&" Von Holey & Makhoane, 2006:92); and waste management issues (Muyanja et al., 2011:1553).

In Asia, the informal food trading sector has expanded in times of economic growth as urban workers have had to face longer commutes and thus, depend increasingly on informal food traders to supply their nutritional needs (FAO, 2007:7). This has led to a realisation in which some calls for new models of public space that accommodate commercial activities such as informal food trading into city plans be prioritised.

From a global perspective, governance has focussed on building institutions and sectors that are progressively evolving and adapting to changing conditions, particularly in developing countries. However, according to Bhattacharjya & Reang (2014:747) the informal food trading sector is not strictly regulated and certified. Therefore, although the survival of informal food trading is necessary for economies to thrive, according to Nigeria's National Food Hygiene Policy (Federal Ministry of Health, Nigeria, 2014:5), "Food-borne illness is a global phenomenon affecting billions of people who suffer from diseases caused by contaminated and poorly cultivated, handled, processed or prepared foods along the supply chain."

Yasmeen (2002:27) maintains that it is possible for the local municipalities to both support and regulate informal food traders, and that there are many examples from around the world where a priority towards acceptance of this type of trade is evident, while facilitating the issues of access to space, licensing, training and hygiene regulation have been key cornerstones to the implementation. The role players in ensuring the above are government employees that focus on food safety at all levels of the food chain.

The Codex document titled "The recommended International Code of Practice – General Principles of Food Hygiene International" which provides a baseline structure for other more specific codes applicable to particular food and beverage sectors is suitable for guiding international authorities certifying informal food traders, and can be used broadly (CAC, 1999:3).

1.4 THE LOCAL PERSPECTIVE OF INFORMAL FOOD TRADING

As of the early twenty first century, there has been emphasis placed on the informal sector, which started as part of major debates in the political, economic and social arenas of policy making in South Africa (Singh, 2004:8). The issue though, is that food legislation, regulation and enforcement have constantly failed to reflect the changing circumstances and incorporate them into town planning to ensure sustainability of informal food trading and its contribution to sustainable development (Njaya, 2014:22). As compared to more developed countries, in South Africa, the significance of informal food trading is very much indifferent as it is an integral part of millions of people's lives.

The traditional setup may be the contrasting feature, as this type of trade takes place in railway stations, taxi ranks, bus terminals, other attractions, and an environment of centralized community, which create conditions ideal for informal trading networks and stands (Gribouski, Gurnon, Jakubowski & Magee, 2007:2). The African Food Security Network (AFSUN) conducted food security surveys in a total of 6 453 households in eleven Southern African cities and found that 32% of households patronised the informal food trader economy almost every day, whilst 59% did so at least once a week (AFSUN, 2010:43 “&” Crush & Frayne, 2011:527).

According to the Ekurhuleni Metropolitan Municipality Informal Street Trading Policy and Management Framework (2008) metropolitan municipalities in the Gauteng province have seen rapid and consistent growth of informal food traders, making them a common feature that reflect change both economically and spatially. A high volume of pedestrian traffic to and from the transportation terminals creates a large customer base and these traders line the designated pedestrian lanes and market squares to take advantage of the volume of commuters. The amendment of the Business Act (Act 71 of 1991) in 1993 gave municipalities within South Africa powers to regulate street trading, but not prevent it. Consequently, environmental health legislation was put in place to regulate informal food trading.

Mokoatle (2016:8) shares that the primary legislation administered by the Food Control Directorate to regulate food premises in South Africa is The Foodstuff, Cosmetics and Disinfectants Act (Act 54 of 1972). Promulgated under this act is R638 of 2018 – regulations governing general hygiene requirements for food premises, the transport of food and related matters. The above regulation defines a food premises as a building, structure, stall or other similar structure, and includes a caravan, vehicle, stand or place used for or in connection with the handling of food, thus including informal food traders.

In Mpumalanga Province, the Ehlanzeni District Municipality was one of the first municipalities to have implemented the recommendations of the Technical Co-operation Programme (TCP) on improving informal food trading in South Africa (Hill, 2016:34). The objective of the TCP project was to improve the quality of informal food in South Africa to ensure consumer safety and provide informal food traders with health education and training regarding acceptable street food preparation and practices (von Holy & Mokhoane, 2006:92). The Ehlanzeni District Municipality compiled street trading bylaws which entailed the provision of basic facilities such as ablution facilities and cleaning services, continuous hygiene training and compliance monitoring of informal food traders through the conducting of inspections (Martins & Anelich, 2000:2).

A number of municipalities followed suit, including eThekweni Metropolitan Municipality, City of Johannesburg and City of Cape Town; with additional attributes including the registration of informal food traders, types of informal trading plans, permits, restrictions on informal trading, waste removal, cleansing and hygiene, special events and microbial food sampling (Hill, 2016:35). The aim has been to minimize the problem of informal food traders becoming a public nuisance in the cities and surrounding towns, as well as decreasing the risk of food contamination and the incidence of foodborne disease outbreaks (Jackson, 2011:33).

The Gauteng based municipalities were largely guided by the informal food-trading programme (IFTP) to promote safe food handling within the informal food-trading sector in the province (Martins & Anelich, 2000:2). This formed part of the World Health Organization's (WHO) initiative to promote healthy cities among communities of Gauteng. Objectives of the programme included providing informal food traders with general knowledge and awareness of good hygiene practices, regulations and bylaws; motivating the informal food traders to become responsible and diligent in providing safe food to consumers (Ekurhuleni Metropolitan Municipality, 2008:4).

1.5 THE PROBLEM CONCEPTUALISED

WHO (2019) adopted a definition by McCarthy that describes environmental health as relating to all measures necessary to deal with the factors in the environment which threaten health. Such factors that directly or indirectly affect informal food trading include poor local infrastructure, characteristics of products sold, in addition to lack of training in food hygiene and sanitation, and of course working under crude unsanitary conditions (Omemu & Aderoju, 2008:397). In the Republic of South Africa the link is further strengthened in studies by Campos et al. (2015:2); Cortese, Veiros, Feldman & Cavalli (2016:178); Samapundo et al. (2016:80) “&” Toh & Birchenough, (2000:448) who collectively add environmental health factors that similarly need to be taken seriously, including, inadequate layout and equipment; improper food handling practices and storage facilities; low quality raw materials; waste management practices; inappropriate informal food trader location; poorly designed stalls; and lack of enforcement.

In Ekurhuleni Metropolitan Municipality (EMM), like many municipalities within the Republic of South Africa, the Economic Development Department is the primary custodian for facilitation of informal food trading.

However, the enforcement functions focussed upon by the Environmental Health Division have been the providing and managing of informal food traders' compliance to health regulations, the conducting of education and the facilitation of training (Ekurhuleni Metropolitan Municipality, 2008:4).

There is considerable research from the perspective of the informal food trader as well as that of the consumers of street foods in developed and developing countries globally (Holy & Makhoane, 2006:90; Privitera & Nesci, 2015:716; Samapundo et al., 2016:80 “&” Singh, Dudeja, Kaushal, & Mukherji, 2016:8). However, literature that specifically focuses on the monitoring of street food requirements, involvement of relevant stakeholders and geared towards the knowledge and practices of EHPs enforcing informal food trader legislation (Mamun & Turin, 2016:15 “&” Proietti, Frazzoli, & Mantovani, 2014:143) is generally patchy, particularly in South Africa.

As a result of the level to which different legislation and international best practices are known, understood and used by those authorized to use them, a quantitative research study was developed and focused on assessing the practices of EHPs inspecting informal food traders.

1.6 RESEARCH STRATEGY

A quantitative research method was used for the study and aimed to assess the practices of EHPs inspecting informal food traders. It was conducted in the Environmental Health offices of 8 sub-regions of EMM (East 1, 2, 3; South 2 and 3; and North 2 and 3), with South 1 being the pilot area. The study commenced after permission was granted by the Ekurhuleni Research Committee of the Ekurhuleni Health District, with informed consent requested from each EHP participant. Ethical clearance was granted by the University of Johannesburg to conduct the study. Piloting of data collection tools – i.e. self-reported questionnaire and data collection checklist – was done before the actual study to ensure the reliability and validity of the information required for the study.

Data was collected using self-reported questionnaires which were distributed at the sub-regional offices, to EHPs who were suitable respondents for the study as per their role in food control as stated in R698 of 2009. To provide important contextual information to complement the questionnaire (Yin, 2011:169), the researcher simultaneously collected quantitative data through review of documented records of informal food trader files belonging to EHPs who completed the questionnaire.

1.7 PROBLEM STATEMENT

Informal food traders serve food to a wide population in South Africa and worldwide. This food is considered generally unsafe and a public health concern due to inconsistent monitoring, enforcement and licensing by applicable regulators. Environmental Health Practitioners are custodians of food control at Municipal health level and ensure that food is handled, stored, prepared and served in such a manner and under such conditions so as to prevent, as far as possible, the contamination of the food and the increase in public health risk for the public. The manner in which EHPs apply the legislation that they are expected to know and practice, has to be consistent in order to increase the safety of food prepared and sold by informal food traders. It is for this reason that the study assessed the practices of EHPs inspecting informal food traders within the City of Ekurhuleni Metropolitan Municipality.

1.8 AIM AND OBJECTIVES

1.8.1 Aim

The aim of the research study was to assess the practices of Environmental Health Practitioners inspecting informal food traders in Ekurhuleni Metropolitan Municipality.

1.8.2 Objectives

- To evaluate the processes followed by Environmental Health Practitioners when inspecting informal food traders;
- To determine Environmental Health Practitioners' knowledge of informal food trading legislation;
- To describe and compare the practices of Environmental Health Practitioners' amongst the regions in Ekurhuleni Metropolitan Municipality; and
- To make data available to be used in the development of strategies that will ensure safe informal food safety.

1.9 SUMMARY

Environmental Health Practitioners (EHPs), in the employ of local authorities are authorised by the Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972) to monitor informal food traders through routine inspections. The inspections are done to ensure effective food control through licensing, certification and statutory enforcement. With momentous growth having occurred within the informal food trading sector, the consequence has become an increased concern regarding food safety and the potential for food borne illness caused by microbiological contamination, resulting from improper food handling (Lui & Zhang, 2014:212) and lack of training (Privitera & Nesci, 2015:716).

This makes food safety an essential role that EHPs play in ensuring proper food handling through inspections, training and monitoring of informal food traders. The study is directed towards the provision of data to be used in the development of more significant strategies for ensuring safe informal food trading and seeks to contribute towards building pragmatic solutions to any challenges and inconsistencies in the application of informal food trading legislation by EHPs within the City of Ekurhuleni Metropolitan Municipality.

2. CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

In the late 20th century, the World Health Organization conducted a survey from 109 countries and reported a key finding that insufficient inspection personnel and insufficient resources were attributes to limited or no regulation of informal food trading (WHO, 1996:2). Fast forward to eight years later where Walker, Prichard & Forsythe (2003) added the lack of technical expertise for inspection and laboratory analysis to those attributes; it then became apparent that the Food and Agricultural Organization was justified in making a call to increase the safety of food sold by informal food traders (Chukuezil, 2010:50). In developing countries, however, the informal food sector continues to lack regulation (Sampundo, Xhaferi, & Devlieghere, 2015:458), with Bhattacharjya & Reang (2014:746) stating that most informal food traders selling cooked food are subsequently not certified. Such certification is required to be done by the sector of Environmental Health.

Von Schirnding (2015:89) defines Environmental Health Practice as an area of science that is concerned with assessing, controlling, and preventing factors in the environment that can potentially affect human health. The practices of inspection personnel are therefore, key to ensuring the safety of food sold by informal food traders and that such food is not harmful to human health.

The first chapter discussed the background and gave an outline of the entire study; this chapter looks at the literature reviewed, discussing briefly the concept and scope of environmental health as it relates to informal food trading. It also highlights legislative issues against a backdrop of global and local trends in the practices of law enforcement agencies and government, and the impact that these practices have had on this growing phenomenon of informal food trading.

2.2 THE CONTEXT OF INFORMAL FOOD TRADING

In the world of informal food trading, where the high proportion of traders do not have access to basic amenities and essential infrastructure such as access to toilets and running water, Environmental Health is important (Mkhize, Dube & Skinner, 2013:7). This is because it is a concern for the health and well-being of not only informal food traders, but of consumers and the general public (Chukuezil, 2010:50). The food prepared by informal food traders is present in both developed and developing countries, and has occasionally been considered to be the hallmark of the early development of fast food (Winarno & Allain, 2009, Defining street foods and fast foods, para.2).

Informal food trading has been classified by Chakravarty & Canet (1996:33) into three general groups. These include: (i) an operation where the vendor prepares food at home and brings it to the food stall to sell; (ii) foods prepared and sold at the food stall; and (iii) foods prepared in a cottage type of factory and brought to the stall for sale. This classification has been adopted by several researchers that have taken a closer look at informal food trading worldwide (Lyons & Brown, 2009:2; Rane, 2011:2; Skinner & Haysom, 2016:11 “&” Stutter, 2017:28).

In addition, key characteristics that make it so wide spread to large parts of the population is that it is quickly available, consumed immediately or later, and generally affordable (Buscemi, Barile, Maniaci, Batsis, Mattina, & Verga, 2011:4). This accessibility therefore highlights a high level of health risk to the population, one that according to Berry (2009:92) requires a balanced enforcement of regulations and municipal by-laws, as well as education and training from competent officials.

It is also widely recognized that informal food traders are often poor, with comparatively low levels of education, and lack knowledge in a variety of areas including; safe food handling, environmental safety, sanitation and hygiene, mode of food display, food service and hand washing, sources of raw materials, and use of potable water (Abdalla, Suliman & Bakhiet, 2009:6967; Barro, Bello, Savadogo, Ouattara, Ilboudo & Traoré, 2006:1107; Hilario, 2015:606 “&” Khairuzzaman, Chowdhury, Zaman, Mamun & Bari, 2014:3).

Consequently, raising the perception of public health risk further, as the major health problem with informal food trading is the foodborne illnesses of microbial origin (Kharel, Palni, Tamang, 2016:235). Besides the foodborne microbial risk, according to Milgram (2011:261), some of the pressing and ongoing risks for many informal traders, including informal food traders, is the possibility that local government authorities will forcibly remove them from the streets or confiscate their equipment, merchandise and apparel. Forkuor, Akuoko & Yeboah (2017:2) adding that this is particularly common in developing nations where there is limited, or no regulation aimed directly at addressing informal food trading. This risk of displacement often increases in the context of elections, major events, or efforts to beautify and update the aesthetic nature of historic city centres (Horn, 2018:5).

Just like formal business operators, informal food traders are less productive in unstable institutional environments where rules are irregular and unpredictable (Schindler, 2013:2596). Informal food traders also face routine occupational hazards, including the lifting of heavy loads of goods to and from their point of sale each day (Gamielien & van Niekerk, 2017:24). Mukhola is cited by Njaya (2014:69) to have described the physical environments in which informal food traders conduct business as typically lacking proper infrastructure, such as clean running water, toilets, and solid waste removal. The risk regarding waste management and environmental sustainability is heightened by their use of single-use plates, cups and cutlery, which limits recycling possibilities and increases the chances of food contamination (Rivera, 2018).

Battersby, Marshak, and Mngqibisa (2016:5) supplement physical hazards to which informal food traders are exposed as the provision of inappropriate fire safety equipment and the improper regulation of traffic in commercial areas. Furthermore, they are exposed to a high concentration of air pollutants and inclement weather, of which take a particular toll on young, susceptible children who must accompany their mothers to vend in the streets (Pillay, 2008:11). Given the growing numbers of the informal food traders and the customers who patronize them, the issues and problems the informal food traders encounter need special attention of the authorities concerned. These authorities include Environmental Health Practitioners (EHPs), Inspectors and Officers on a global scale (Von Schirnding, 2015:221).

2.3 INTERNATIONAL AND NATIONAL LEGISLATIVE CONTEXT

2.3.1 Introduction

Informal food traders' legal status can act as a bridge between their employment conditions and the range of employment risks they face (Hill, 2016:26). Christine Evans-Klock, Director of the InFocus Programme on Boosting Employment through Small Enterprise Development is cited by Motala (2002:3) as stating that a trader with a fixed structure in a designated market may be more likely to hold a license or permit, and in turn would be less exposed to certain kinds of risks. Likewise, an informal trader who works as an employee selling a particular kind of product, such as newspapers, may be better protected by law and therefore less vulnerable (Peberdy, 2016:6 “&” Lyons & Brown, 2009:2). Obtaining legal status of some kind is therefore a key demand of informal trading organizations in many cities, as well as individual informal food traders.

However, the regulation of informal food trading falls within the food control systems of the countries in which they operate, making it essential for countries to develop policies that touch on food hygiene and safety (FAO, 2018, para.5).

2.3.2 International Informal Food Trading Legislation

Food legislation and regulatory control of informal food trading varies from country to country, with most countries not having regulations specific to this sector (INFOSAN, 2010:2). This causes informal food trading activities in most developing countries to fall outside the ambit of specific regulation and tailored protection by government (Alimi, 2016:243). Individual countries in West Africa for instance regulate informal food trading by relying on general food safety laws and procedures, which may pertain to the handling and labelling of food and animal products, health and environmental sanitation (Nicolo & Bendeck, 2016:14). Generally, the national regulations used draw on food control guidelines and safety policies developed by World Health Organization (WHO) and Food and Agriculture Organization (FAO) through a joint body known as the Codex Alimentarius Commission (CAC).

This body is constituted by 176-member countries and is responsible for ensuring the actual implementation of food standards (Nicolo & Bendeck, 2016:18) which are highly recommended but not binding on national governments and municipal authorities (Bessy, 2009:10). According to Bessy (2009:11), for any developed standards, regulations and policies to be effective, the CAC recommends that they firstly contain the food control systems which have an aspect that deals with the legal aspects of food control including food laws, regulation, and standards. Secondly, there must be aspects of the control component dealing with the management of food control including inspection and laboratory services. Thirdly, there must be an aspect of the food control component dealing with or performing monitoring functions including surveillance of food borne diseases and the ability of the food control system to respond effectively to emergencies and outbreaks.

Lastly, there must be an aspect of the food safety component performing educative functions, including training, public information and education, as well as communication.

Even though these standards are general and not specific to the informal food trading sector, the four key components outlined above can be used as important

guidelines in developing laws and regulations for the informal food trading sector (Forkuor, 2015:30). A review of the situation in Asia (India, Thailand) found great diversity among the legal instruments developed to control informal food trading (Winarno & Allain, 2009, Street foods and consumers, para.1). This continent is where informal food trading is the most widely and increasingly accepted as a permanent and positive urban feature; where policy, institutional and practice innovations seem the most dynamic (Bénit-Gbaffou, 2015:12).

For instance, prior to food production, handling and sale, informal food traders have to complete administrative procedures and apply to the authorities for a trading site and permit (Carrillo-Rodriquez & Reed, 2018:12 “&” Kusakabe, 2014:3). The application includes a medical certificate from the medical services approved by the Ministry of Public Health, evidence of vaccination against typhoid fever and cholera, and the results of medical and biological tests, including: analysis of faeces; urine and blood; sputum, skin test reaction (tuberculosis) and an X-ray. These tests are required every twelve months (Kusakabe, 2015:7).

According to the Rules of Trade in the Bangkok Area Waiver Act July 18 B.E. 2548 (2005), informal food traders are allowed to operate at night (7 p.m. to 2 a.m.) at designated places and can provide two tables for seating. In some countries like Senegal, they also need a sanitary certificate from the Ministry of Health services confirming that their food production and sale premises are clean and conform with regulations, whereby there are penalties for non-compliance, including short-term prison sentences or fixed fines (Battersby et al., 2016:17). In those countries where informal food trading activities are regulated by law, the regulations or by-laws affecting the informal food trading sector are part of a larger body of legislation dealing with food, health, or environmental sanitation (Stutter, 2017:28), including licensing or registration systems, inspection systems, and codes of practice.

An example would include a number of pieces of legislation relating to the preparation and sale of safe street foods that have been established by the Bangladesh government. The Bangladesh Pure Food Ordinance 1959 (revised

2005) has several sections dealing with the safety of street food, including: adulteration of food; prohibition of calcium carbide, formalin, and insecticide; selling unwholesome food; uncovered foods; and unhygienic premises and violations of the health code (Islam & Roy, 2014:8). The other relevant legal measures related to safe street foods are the Bangladesh Standards and Testing Institution (BSTI) Ordinance 37 of 1985; the Consumers Rights Preservation act 2009; and the Penal Code of 1860, sections 272-276. In Kumasi, a city within the country of Ghana, there is no regulatory body with its sole mandate being the regulation of informal food trading (Forkuor, 2015:34).

What exists are a number of institutions whose mandate include, but are not limited to the regulation of informal food trading. There is also a lack of specific informal food trading rules that take into consideration the different modes of preparation of the different foods (Forkuor, Akuoko & Yeboah, 2017:2). Table 2 below illustrates international legislation and standards deemed generally applicable for informal food trading and are monitored, used and in some cases enforced by inspection authorities, including Environmental Health Practitioners (EHPs).

Table 2: International Legislation and Standards Applicable to Informal Food Trading

Regulations or Guidelines	Key Aspect	Source
Codex Alimentarius	Food Control guideline and safety policy	https://www.who.int/foodsafety/ar/eas_work/food-standard/en/
The International Health Regulations Act 28 of 1974	To apply international health regulations	http://www.gov.za/sites/www.gov.za/files/Act%2028%20of%201974

Regulations or Guidelines	Key Aspect	Source
ISO 22000	Farm to Fork Standardisation for Food Safety Management Certification	https://www.sabs.co.za/Sectors-and-Services/Sectors/Food/food_ac.asp
HACCP Implementation in Small Businesses	Regulation and control of street food quality	http://www.fao.org/3/a0740e/a0740e03.pdf
International Food Standard	Evaluation system for food suppliers	https://www.dnvgl.com/services/if-s-international-food-standard-5172
FAO Risk-based food inspection manual	Procedures for Inspection of Food Handlers	http://www.fao.org/3/i0096e/i0096e00.htm

On an international level there is minimal literature showing advancement in informal food trading legislation (Mlay, 2018:46), yet more than two decades ago a technical meeting was held by the FAO involving ten experts, where recommendations were made that a scientific approach be used in the development of regulations, keeping in mind the special characteristics of; and health concern around informal food trading (FAO, 1995). Furthermore, the meeting was of the opinion that codes of practice could be more appropriate for informal food trading type of operations, rather than the traditional rules and regulations (FAO, 1995).

Such codes, generally recommended by national food control authorities, could be further modified as necessary by the local authorities to suit the local situation. It is also important to note that Environmental Health Officers (EHOs), no less than 10 years later made recommendations to legislature in Zambia and Zimbabwe that

food laws should be adapted to changing circumstances, but should retain the ability of regulating the safety of food (Gadaga, Zulu, Graffham & Chibanda, 2005:6). In addition, these laws should therefore be written in both English and the local languages for better comprehension by EHPs and informal food traders (Forkuor, 2015:34).

2.3.3 National Informal Food Trading Legislation

The history of South Africa is characterized by stagnation, restrictions and legislation that slowed the growth of the informal trading economy (Pillay, 2008:11). A restriction includes the prohibition on Informal food trading, a law prevalent and enforced in most municipalities in Limpopo (Agrisystems Consortium, 2008:21). Despite this type of restriction, it is argued that regulations within South Africa (national, provincial and local) have a less significant impact than is commonly suggested because many informal enterprises simply ignore regulations, depending on the activity (Mkhize, Dube & Skinner, 2013:7).

Whilst informal enterprises often ignore regulations, it should not be concluded that they have no desire for regulation. In situations where over-trading occurs, informal food traders have been known to seek assistance from local authorities through regulation to ensure their business survival from the threat of new entrants (Valodia, 2006:5). However, there are a number of flaws in current policy and by-laws, intended to protect municipalities rather than empower informal food traders. By-laws in particular are focusing on what should not be done, rather than on what should (Béni-Gbaffou, 2015:12).

In South Africa, there is no specific legislative document that addresses informal food trading exclusively. As is the case in most countries, the informal food traders locally are inspected under the auspices of different generic and food safety laws. Table 3 below depicts the pieces of legislation that apply in part to the trading, inspection and hygiene practices of informal food traders within South Africa.

Table 3: Legislation used for the Control of Informal Food Trading

Name	Promulgation Date	Jurisdiction/Department/Division
The Business Act (Act 71 of 1991)	24 May 1991	Local Government – Local Economic Development
The National Health Act (Act 61 of 2003)	02 May 2005	Provincial and Local Government – Environmental Health
National Norms and Standards for Premises and Acceptable Monitoring Standards for Environmental Health Practitioners (Notice 1229 of 2015)	24 December 2015	Provincial and Local Government – Environmental Health
Regulations Defining the Scope of the Profession of Environmental Health (R698 of 2009)	26 June 2009	Provincial and Local Government – Environmental Health
The Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972)	01 January 1973	Provincial and Local Government – Environmental Health
Regulations Governing the General Hygiene Requirements for Food Premises, Transport of Food and Related Matters (R638 of 2018)	22 June 2018	Provincial and Local Government – Environmental Health

Name	Promulgation Date	Jurisdiction/Department/Division
Regulations Relating to the Powers and Duties of inspectors and analysts conducting inspections and analyses at Food Premises (R328 of 2007)	20 April 2007	Provincial and Local Government – Environmental Health
Regulations Relating to the Labelling and Advertising of Foodstuffs (R146 of 2010)	01 March 2010	Provincial and Local Government – Environmental Health

According to the Business Act 71 of 1991 municipalities are not allowed to prevent informal food trading from taking place, however, they can take control by making bylaws and regulations which stipulate where trading is allowed. Chaka (2017) adds that council resolutions have to be passed for these bylaws to come into effect. Under the jurisdiction of Environmental Health the bylaw included is the Public Health by-law and under the jurisdiction of the Municipal Police Department, i.e. Ekurhuleni Metropolitan Police Department, the bylaw involved is the Street Trading By-law.

Unfortunately, regulators work within a weak organisational context of poor resources (human, financial and logistics), a situation, which has affected their effectiveness as well as their motivation (Forkuor, Akuoko & Yeboah, 2017:2). Informal food traders in turn are poorly informed of who regulators are and what they are legally allowed to do. These challenges have negative implications for the regulation of informally-traded foods and for the well-being of informal food traders and urban residents at large (Steyn, Labadarios & Nel, 2011:2).

2.4 THE ROLE OF ENVIRONMENTAL HEALTH IN INFORMAL FOOD TRADING

The general role of Environmental Health encompasses the assessment and control of those environmental factors that can potentially affect health and is targeted towards disease prevention and the creation of healthy supportive environments (WHO, 2018, Environmental Health, para.1). This role is executed by Environmental Health Practitioners (EHPs). According to Campbell (2011:26), EHPs (also known as Environmental Health Officers [EHOs] or Health Inspectors in other countries other than South Africa) are trained professionals, competent to enforce, amongst others, Food Safety legislation in their country of domain and are authorized as Inspectors.

EHPs were responsible for the implementation of R962 Regulations Governing the General Hygiene Requirements for Food Premises and the Transport of Food (Mukweho, 2018:25), which have since been repealed by R638 Regulations Governing the General Hygiene Requirements for Food Premises, Transport of Food and Related Matters. Under these regulations, the functions of the municipal EHPs include administering applications to formal food business and informal food traders (defined as food premises), inspecting trading sites and upon the prerequisites being complied to, they issue a Certificate of Acceptability (COA) which approves that the applicant trades in food preparation activities.

As is the case from the repealed R918 and R962, the COA must be in the public domain at all times and is not transferrable from one person to another (Gordon-Davis, 2011:231). Trafialek, Drosinos & Kolanowski (2017:351) state that frequent food hygiene inspections can improve adherence of food handlers to personal hygiene and food safety practices, which then safeguards public health. Inspections have further been advocated in other research as ways to manage and improve the hygiene of foods prepared by informal food traders (Henderson, Yun, Poon & Biwei, 2012:850 “&” Adjrah et al, 2013:6969), especially when conducted regularly and made more stringent (Hill, Mchiza, Fourie, Puoane & Steyn, 2016:26).

The authority to enter a food premises is granted by R328 Regulations relating to the powers and duties of inspectors and analysts conducting inspections and analyses at food premises (Mokoatle, 2016:16). These regulations enable EHPs to issue written orders for non-compliance, in which he or she instructs that the activity or condition stated in the order must be rectified immediately or within a specified period determined by the EHP. Furthermore, they are given the authority to collect samples of suspicious foodstuffs that are likely to be dangerous or harmful to health, detain such foodstuffs and should the sample results agree with such suspicion the EHP can condemn and destroy such foodstuffs in an approved manner (R328, 2007).

This authority is significant for the inspection of informal food traders. Proiretti, Frazzoli, & Mantovani (2014:143) observed that most informal food traders procure low quality, cheap raw materials such as poisoned fish, milk from sick animals, and Alimi (2016:243) added that they also procure vegetables with heavy chemical concentration. In a study, Choudhury *et al.* (2011:197) observed that all the mobile informal food traders and owners of small restaurant procured unlabelled and unpacked food grains and semi-processed ingredients from grocery shops. These cheap raw materials used by informal food traders have been linked to outbreaks of food-borne illnesses (Mukwevhu, 2018:24).

Training and education is another role that EHPs play in the management of informal food trading. In 1999, there was a major initiative by the FAO, known as the FAO Street Food Project, which was aimed at enabling multiple governments, including the South African Department of Health to focus on training and education components regarding Informal food trading (Khuluse, 2016:4). A previous study also highlighted the need for training and education of informal food traders (Muyanja et al., 2011:1553). In 2001, the Department of Health developed a training manual for use by EHPs, the aim of which was to encourage EHPs to focus on training and addressing informal food traders, however it was expressed that there was uncertainty as to the effectiveness of the training in improving knowledge about and practices on food hygiene and safety (Campbell, 2011:36).

This was considered as a result of some informal food traders seeing training as a hindrance rather than a benefit towards growing their business (Booyesen, 2011:68). For example, a study undertaken by the University of Limpopo conducted in 2008 into the creation of capacity in co-operatives shows that unless training is specific, tailored and available outside of business hours it remains unattractive (Sezgin & Sanlier, 2016:4073), with the immediate need to generate income far exceeding training needs (Campbell, 2011:36). In contrast, there is need for continued training of EHPs in order to ensure uniform application of legal procedures and more complete coverage during inspections (Gadaga et al., 2005:6 “&” Khuluse, 2016).

As highlighted by the Ekurhuleni Metropolitan Municipality Informal Street Trading Policy and Management Framework (2008), EHPs have to collaborate with several stakeholders to enhance informal food trader compliance. This collaboration gives EHPs the opportunity to organise awareness campaigns through rallies, seminars, workshops, and comment on policy documents. Furthermore, EHPs work with electronic and print media outlets to provide public awareness of safe street foods (Liu, Zhang & Zhang, 2014:212). Though collaboration is encouraged, Abdalla, Suliman & Bakhiet (2009:6970) stress that there should be minimal interference and emulation of EHO duties by stakeholders regarding the inspection of informal food traders.

Another key function is the carrying out of surveys in informal food trading enterprises for statistical purposes. This is a key function that should be actioned by EHPs as highlighted by R698 of 2009 regulations defining the scope of practice of Environmental Health Practitioners, so that the population of registered informal food traders is well known and better managed through monitoring. Environmental Health has a trichotomous structure which includes governance, the profession and research (Wright, Mathee & Oosthuizen; 2014:3). It then becomes fundamental that the gap of insufficient research pertaining to the practices of EHPs inspecting informal food traders be assessed, with the possibility of filling such gaps and developing the necessary interventions for implementation.

2.5 SUMMARY

Informal food trading plays a vital role in the economic and social frontier of many communities on an international and national scale. However, despite their importance, there are key constraints to the effective management of informal food trading that span from lack of awareness of personal hygiene and safe food for consumers, to a lack of understanding of the expectations required of them as food handlers. There are additional challenges that include a lack of legislative accommodation of informal food trading, where specific and tailor-made documents that speak to their special characteristics are made and enforced, particularly in South Africa.

The significance of how food safety laws are enforced is also key. A lack of clarity in existing legislation and standards on informal food trading, coupled with limited action by regulatory bodies for licensing makes enforcement non-linear. In addition, this has caused the inability of EHPs and other regulatory departments to take penal actions against informal food trading; as a result of absence of appropriate training and supervision of this sector.

The magnitude of the role of EHPs in limiting the public health risks associated with informal food trading activities cannot be overlooked, however, the manner in which they actively and uniformly execute this role based on what they know has been ignored, therefore highlighting a gap in previous research. Chapter 3 will describe the methodology and tools used to assess the practices of EHPs inspecting informal food traders within the City of Ekurhuleni Metropolitan Municipality, South Africa.

3. CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter two outlined the literature reviewed in an endeavour to understand the context of informal food trading, international and national legislative perspective and the role of Environmental Health in the sector of informal food trading. This chapter's focal points will be on the planning and administration of the study, giving a detailed description of the study methodology. Specific attention is paid to the research design, the sample population, the research instruments utilised and how the data was collected and analysed. Reference is made to the ethical considerations taken in the study, outlining the approval and consent obtained to conduct the study and collect the data.

The researcher selected a quantitative research approach to answer the aim and objectives of the study. The study aimed to assess the practices of EHPs inspecting informal food traders in the City of Ekurhuleni Metropolitan Municipality. The municipality is divided into three regions namely North, South and East, with each region further subdivided into 3 sub-regions.

These sub-regions include Northern Service Delivery Area 1 (NSDA 1); Northern Service Delivery Area 2 (NSDA 2); Northern Service Delivery Area 3 (NSDA 3); Southern Service Delivery Area 1 (SSDA 1); Southern Service Delivery Area 2 (SSDA 2); Southern Service Delivery Area 3 (SSDA 3); Eastern Service Delivery Area 1 (ESDA 1), Eastern Service Delivery Area 2 (ESDA 2) and Eastern Service Delivery Area 3 (ESDA 3). The pilot study was conducted in SSDA 1. The study population included EHPs who are appointed by the municipality and inspect informal food traders within its area of jurisdiction.

3.2 RESEARCH DESIGN

A research design is a detailed plan that explains how different methods and procedures should be applied during a research process to find answers to the research questions as validly, objectively, accurately and economically as possible (Kumar, 2014:122). Ndhambi (2012:35) sites Henning as describing the purpose of a research design to be the explanation of the approach that is utilised in testing the problem statement of the dissertation or thesis, with Madumo (2017:11) adding that it provides the basic essential for the research techniques to be utilised.

Fundamentally, there are two approaches to research and these include quantitative and qualitative (Fouche & Schurink, 2011:312). According to Madumo (2017:11), qualitative and quantitative research designs differ significantly, in that, on the one hand, the design of a quantitative research study determines the researcher's choices and actions. On the other hand, the researcher's choices and actions determine the research design or strategy in qualitative research. Table 4 below summarizes the core differences between the two approaches.

Table 4: Difference between Quantitative and Qualitative Research Methods

Qualitative research	Quantitative Research
The aim is a complete, detailed description.	The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.
Researcher may only know roughly in advance what he/she is looking for.	Researcher knows clearly in advance what he/she is looking for.
Recommended during earlier phases of research projects.	Recommended during latter phases of research projects.
The design emerges as the study unfolds.	All aspects of the study are carefully designed before data is collected.

Qualitative research	Quantitative Research
Researcher is the data gathering instrument.	Researcher uses tools, such as questionnaires or equipment to collect numerical data.
Data is in the form of words, pictures or objects.	Data is in the form of numbers and statistics.
Subjective – individuals interpretation of events is important ,e.g., uses participant observation, in-depth interviews etc..	Objective: seeks precise measurement & analysis of target concepts, e.g., uses surveys, questionnaires etc.
Qualitative data is more 'rich', time consuming, and less able to be generalized.	Quantitative data is more efficient, able to test hypotheses, but may miss contextual detail.
Researcher tends to become subjectively immersed in the subject matter.	Researcher tends to remain objectively separated from the subject matter.

Source: Adapted from Bryman (2012)

In order to describe and determine the extent to which the practices of EHPs inspecting informal food traders are similar or different, uniform or inconsistent, a descriptive quantitative research approach was used in this study. According to Rahman (2016:105), quantitative research focuses on those aspects of social behaviour that can be quantified, patterned and estimated to fit certain population parameters. Although each research approach has its inherent strengths and weaknesses (Kroeze, 2012:4), the quantitative research approach was selected as a result of the following advantages that are better suited for this study:

- Pre-existing knowledge can be used and permits the use of data collection tools such as questionnaires or structured interviews (Rahman, 2016:105 & Bryman, 2012:35);
- Allows for a variety of variables to be tested in one go (Carroll & Bailey, 2016:23);

- The quantitative findings are likely to be generalised to a whole population or a sub-population because it involves the larger sample which is randomly selected (Powers D. & Powers A. 2015:153); and
- Data analysis is less time consuming as it uses statistical software (Powers D. & Powers A. 2015:153:).

Within the structured quantitative approach, surveys are common. Survey questionnaires are widely used as a means for collecting information, but other survey techniques include structured and in-depth interviews, focus groups, observation and content analysis (de Vaus, 2014:3). The distinguishing features of surveys are the form of the data and the method of analysis (Kumar, 2014:122). For achieving the objectives of the study, the chosen tools included self-reported questionnaires and data collection checklists. The advantages of using a self-reported questionnaire that is of sound construction include convenience, encouraged anonymity and varied data from closed-ended and open-ended questions (Griffie, 2012:136).

Questionnaires work well with other data collection instruments as they can be combined with other sources (Pandey & Pandey. M, 2015:18), as was the case with this study. In addition to the use of the questionnaire, the researcher collected quantitative data through a review of documented records acquired from Environmental Health offices and marked to represent informal food trader premises where monitoring had taken place. This assisted in enhancing a triangulated approach towards arriving at the findings of the study and enabled the researcher to overcome the different weaknesses inherent in the questionnaire method of data collection (van Wyk, 2016:16).

3.3 RESEARCH SETTING

According to the South African Municipality Database (Stats SA, 2016), the following is a description of the City of Ekurhuleni Metropolitan Municipality, within which the research study was conducted.

The City of Ekurhuleni Metropolitan Municipality is a Category A municipality covering an extensive area totalling 1975km². The former administrations of the nine towns in the former East Rand were amalgamated into the metropolitan municipality, along with the Khayalami Metropolitan Council and the Eastern Gauteng Services Council. It is one of the most densely populated areas in the province, and the country.

The city, as depicted in **figure 1**, is divided into three regions namely North, South and East, with each region further subdivided into 3 sub-regions (City of Ekurhuleni, 2019). The study was undertaken in all sub-regions, which include NSDA 1; NSDA 2; NSDA 3; SSDA 2; SSDA 3; ESDA 1, ESDA 2 and ESDA 3; with the exception of SSDA1 where the pilot study was conducted. The Environmental Health Division falls under the Health and Social Development Department.

Figure 1 also demonstrates regional breakdown and its position within the Gauteng province. It accounts for nearly a quarter of Gauteng's economy, which in turn contributes over a third of the national Gross Domestic Product. Many of the factories for production of goods and commodities are located in Ekurhuleni, often referred to as 'Africa's Workshop'. The network of roads, airports, rail lines, telephones, electricity grids and telecommunications found in Ekurhuleni rivals that of Europe and America. It can be regarded as the transportation hub of the country, hence serving as an attraction for informal food trading.



Figure 1: City of Ekurhuleni Metropolitan Municipality Map (not to scale) and Positioning in Gauteng

(Source: Municipal Demarcation Board; www.demarcation.org.za)

In addition to being home to OR Tambo International Airport; the city allows a well spread-out informal food trader demographic through being South Africa's largest railway hub and having the OR Tambo International Airport Industrial Development Zone (IDZ).

3.4 STUDY POPULATION

According to Pandey & Pandey, M (2015:19) a study population means, the entire mass of observations, which is the parent group from which a sample is to be formed. Schutt (2012:17) adds that this is the group to which the study findings are to be generalised.

Within the nine sub-regions of the City of Ekurhuleni Metropolitan Municipality there was a total number of 113 registered EHPs at the time of data collection (Chaka, 2017). The population included both males and females, of all ages, of all races and appointed by the City of Ekurhuleni Metropolitan Municipality to ensure Food Control within its area of jurisdiction. From this total, twenty EHPs who specialise in other services such as Pest Control, Air Quality Control and do not deal directly with the Municipal Health Service function of Food Control were excluded. Eleven EHPs formed part of the pilot group. A further thirteen EHPs did not have informal food traders in their area of jurisdiction. Therefore, a total of 69 EHPs formed the study population.

3.5 SAMPLING

The researcher requested the list of all registered EHPs from the Divisional Head of the Environmental Health Division and a non-probability sampling strategy known as purposive sampling was used. Sharma (2017:751) defines purposive sampling as a process in which a researcher selects the cases to be included in the sample based on their judgement and characteristics, in order to realise specific research needs. Bhattacharjee (2012:67) adds that it is used in order to access knowledgeable people who have in-depth knowledge about particular issues, by virtue of their professional role, expertise or experience. In total, 54 EHPs participated out of a total number of 69 eligible EHPs in the municipality at the period of study.

This means 78.30% of the EHPs appointed to perform the function of Food Control and dealing directly with informal food traders participated, giving a representative sample to enable concreteness and confidence of findings (Morton, Bandara, Robinson & Carr, 2012:107 “&” Saleh & Bista, 2017:66).

Simple random sampling was used to sample document records of informal food trader premises. Simple random sampling is the simplest of all probability sampling techniques, is unbiased and the inferences of which are most generalisable (Bhattacharjee, 2012:67). A sample of 10% of the total population of informal food trader files was reviewed per EHP that completed the questionnaire. Therefore, the total number of files reviewed was 80. Rohwer, Schoonees & Young (2014:236) “&” van Wyk (2016:16) state that by sampling the files for review, it allows for data and information triangulation and accuracy, thereby enhancing the researcher’s confidence.

3.6 DATA COLLECTION

According to Barrett & Twycross (2018:63), data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. In addition, when data collection is done using more than one instrument, the chances of increased accuracy in data is increased (Wolf, 2016:105).

Two data collection instruments were used, namely, a self-reported questionnaire (Appendix A) and a data collection checklist (Appendix B) for review of documents records. Emails were sent to each sub-regional Environmental Health Manager, the purpose of which was to request a time for conducting a briefing session with the EHPs. This also served to build affinity before the actual data collection. The briefing session highlighted all ethical approvals received to conduct the study, an explanation of the background and purpose of the study and the matter of obtaining a written informed consent from potential participants.

An information letter (Appendix C) was designed and utilised to ensure consistency in the briefing sessions across all the regions, accompanied by a consent form (Appendix D) for obtaining written consent from participants. The questionnaires were issued out at the municipal sub-regional Environmental Health offices for completion by interested EHPs and the researcher simultaneously collected additional quantitative data through document review of informal food trader files premises for EHPs who participated in the study. The review of documents is particularly useful for documenting implementation and practices (Bretschneider, Cirilli, Jones, Lynch & Wilson, 2017:23), and thus served to enhance the quantitative results of the questionnaire.

3.6.1 Self-Reported Questionnaire

Self-reported questionnaires are useful for sensitive issues and can be completed in private, thereby allowing for full expression by the participant, and moreover, they are relatively easy to administer (Wenzel, 2015:5), are usually cheaper and allow for large samples to be selected (Demetriou, Ozer & Essau, 2015:2). In addition, they are the most commonly used data collection instruments in modern research methodology (Strauss & Schinke, 2019:307).

To ensure consistency with Griffie's (2012:136) statement that "sound questionnaire construction is a highly developed art form within the structure of scientific inquiry", an expert on questionnaire design at STATKON reviewed the questionnaire (Appendix I). The written language used for the questionnaire was English and the questionnaire contained closed ended questions that followed the Likert-type scale.

The self-reported questionnaire was used to determine the EHPs' level of knowledge of informal food trader inspections and related informal food trader legislation; EHPs' perspective regarding the risks associated with informal food trading; and EHPs' practices when inspecting informal food traders.

The questionnaire was divided into three sections, namely:

- Section A – Study population characteristics which dealt with the following:
 1. Position occupied
 2. Years of Experience and period based at applicable office
 3. Highest qualification
 4. Area based and area of jurisdiction

- Section B: Knowledge sought regarding informal food trader inspections included the following:
 1. Period lapsed since last informal food trader inspection
 2. The extent to which informal food trading is considered a public health concern
 3. Definition of informal food trading
 4. Awareness regarding the presence of informal food traders in area of jurisdiction
 5. Rate of importance and frequency of referral to legislation
 6. Frequency of implementation of legislation; and

- Section C – Practices of EHPs inspecting informal food traders focused on the following:
 1. Keeping of records in file
 2. Use of work tools for inspections of informal food traders
 3. Frequency of inspections
 4. Frequency of training of informal food traders
 5. Measures taken for legislative non-compliance
 6. Submission of informal food trader files to senior EHPs

For the comprehensive list of questions and options afforded to respondents, refer to **Appendix A**.

The consent form, information letter and self-reported questionnaire were distributed and handed out personally by the researcher in an envelope, for the EHPs to complete on their own. During briefing sessions, the researcher emphasised that discretion and prudence be maintained while completion of self-reported questionnaires took place, this was done to discredit coercion of information and thus limiting any possible bias in the data.

The EHPs have individual workstations, which assisted for the sole completion of the self-reported questionnaire at their own leisure and comfort until collected by the researcher. Furthermore, a uniform date for collection of the questionnaires was announced, with the researcher calling and reminding the managers' of the participants of the collection date every two weeks. When the date of collection arrived, the researcher collected the questionnaires personally in sealed envelopes signed by the participants.

3.6.2 Data Collection Checklist

Document review is a systematic procedure in which data is collected through the evaluation of existing documents, whether in printed or electronic format and is a form of secondary data (Kraemer & Blasey, 2015:52). By using a data collection checklist, the researcher attempted to triangulate data, by providing a convergence of evidence with the self-reported questionnaire method described above, so as to breed credibility and reduce the impact of potential bias (Bretschneider et al., 2017:23).

Furthermore, according to the Centres for Disease Control (CDC) and Prevention Evaluation Briefs (2018:2), the review of documents provides the following advantages: It is a relatively inexpensive process; and serves as a good source of background information. It is also unobtrusive; provides a behind-the-scenes look at a program that may not be directly observable; and it may bring up issues not noted by other means.

The review of document records of informal food trader files was done at the eight sub-regional Environmental Health Offices of the City of Ekurhuleni Metropolitan Municipality, with prior ethical approval received from the Ekurhuleni Health Research Committee (Appendix E). The data collection checklist was used to summarise key information that was grouped into different categories extracted from the documents reviewed.

Information recorded included the following:

- Full details displayed on informal food trader file;
- Indication of type of structures used by informal food traders;
- Indication on inspection dates;
- Frequency of inspections;
- Issuance of COA and supporting application documents;
- Inspection reports found in file;
- Action indicated for non-compliance;
- Review of file by Senior EHP; and
- Action by senior EHP.

For the detailed list of recorded information, refer to **Appendix B**.

3.7 PILOT STUDY

Pilot studies are small-scale, preliminary studies which aim to investigate whether crucial components of a main study are feasible and in order to ensure that what is sought to be elicited is in fact, what is elicited (Cocks & Torgerson, 2013:5). According to In (2017:601) pilot studies look at three main aspects, including; process, resources and management of the research study. Process focuses on retention levels and eligibility criteria; resources focus on time allotted to complete the study or whether the form(s) of evaluation selected for the main study are as good as possible; and management looks at problems with data management and with the team involved in the study.

SSDA 1, one of the sub-regions within the City of Ekurhuleni Metropolitan Municipality, which did not form part of the study population, was used for piloting and respondents were EHPs who complied with the inclusion criteria. EHPs participating in the pilot study were further handed a blank feedback sheet in which the inputs, recommendations and additional comments were recorded. Mbonane (2015:50) cites Baloyi as stating that piloting a questionnaire specifically assists in identifying questions that require simplification; errors in sentence construction; significant aspects not included in the questionnaire; and typing mistakes that include numbering and coding. The researcher also reviewed informal food trader files of the EHPs who participated. Table 5 below gives an indication of the response rate for the questionnaire and the total number of files reviewed in the pilot sub-region.

Table 5: EHP Sample Population & Informal Food Trader File Reviews for Pilot Sub-region

Sub-Region	Number of EHPs	Number of EHPs without Informal Food Traders	Questionnaires Disseminated	Questionnaires Received Back	Consent Forms Received Back	Data Collection Checklist Used (Yes/No)	Number of Informal Food Traders	Number of files assessed	Remarks/Comments
SSDA 1 - Germiston (Pilot)	11	0	10	9	9	Yes	152	15	1 EHP on Maternity Leave & excludes the researcher, who is appointed under SSDA 1

The pilot study revealed the following to the researcher:

- An indication of the estimated time taken to complete the questionnaire;
- The language and terminology used in the questionnaire was clear and understood by the participants as no need for clarity arose;
- Additional answerable options were requested in some questions as the respondents made mention that some options were missing;
- The numbering and sequence of the questions was logical and orderly, therefore ensuring dependability and evenness;
- The questionnaire provided the data that the researcher was looking for, therefore questions remained unchanged; and
- There was a response rate of 90% without any additional elicitation from the researcher.

The researcher rectified the identified challenges and sought further comment on the rectified questionnaire. The pilot respondents were satisfied with the changes.

3.8 RELIABILITY AND VALIDITY

As stated by Azeroual & Abuosba (2017:82), the data quality of any research study is of great importance. They emphasise that only correct data can provide resilient, useful results and allow for a profound understanding of the research data collected and analysed, which assists in always keeping research establishments always up-to-date. The completeness, correctness and timeliness of the data are thus essential for successful research presentation that is reliable and valid. In addition, according to Chen, Hailey, Wang & Yu (2014:5171) “&” Batini, Cappiello, Francalanci & Maurino (2009:2) data errors extend across different areas and weaken the entire research activities of any project.

Reliable and valid research offers opportunities to collect, categorize and use research information, be it for publication lists, for the preparation of projects, for the reduction of the effort required to produce reports, or for the external presentation of research activities and scientific expertise (Marsden & Pingry, 2018:2). The previous section discussed the significance of piloting this research, now the researcher discusses the reliability, validity and response rate that played a part in ensuring data that is trustworthy and can be duplicated in further research.

3.8.1 Reliability

Research reliability is the degree to which research methods produce stable and consistent results (Dudovskiy, 2018:102). In other words, a specific measure is considered to be reliable if its application on the same object of measurement number of times produces the same results. Mbonane (2014:51) states that reliability is concerned with accuracy, precision, consistency, stability, homogeneity and equivalence. The researcher ensured reliability in the study by designing and discussing the questionnaire and data collection checklist with the research supervisors. In addition, consultation was made with data collection design experts at STATKON (see **Appendix I**), whereby inputs were considered, and changes made accordingly.

The researcher emphasises the piloting of the instruments, whereby participants were given a blank feedback sheet asking them to write any additional comments about the questionnaire and recommendations to improve it. This tested both test-retest reliability and internal consistency.

3.8.2 Validity

Validity is the extent to which the scores from a measure represent the variable they are intended to (Mohajan, 2017:59). According to Dudovskiy (2018:102), tests that are valid are also reliable; however, tests that are reliable are not always valid. In research, there are various validity tests that are applied to ensure that variables are represented as intended.

Salimi & Ferguson-Pell (2017:3) add that for the research study to be considered dependable, the research design and its implementation has to describe what was planned and executed on a strategic level; the operational detail of data gathering, addressing the minutiae of what was done in the field has to be clear; and a reflective appraisal of the project must be available.

External validity in this research is relatively high as it can be applied to other municipal settings, EHPs and times dating back to more than two decades, thereby making it generalizable based on past data. The researcher strengthened convergent validity by using more than one tool as a data collection source, thereby creating ground for triangulation and variable measurement more definitively. The questionnaires and data collection checklists used were uniform across all study sub-regions and if another researcher used it, it would answer the same questions the same way, as it is standard, therefore increasing face validity through the pilot.

The researcher focussed on content validity by studying and linking the objectives of the study with constructs around knowledge and associated practices. Sampling validity was also key, as purposive sampling was used to get professional EHPs whose inclusion criteria was maintained. Furthermore, to ensure credibility of the study, amongst other things previous research data was examined, with the researcher gaining background on the research undertaken, having necessary qualifications and experience in the field of Environmental Health could also assist in identifying and concurring with the responses.

Confounding factors were not considered to have a major impact on the internal validity of this research study.

3.8.3 Response Rate

The percentage of people who respond to a survey is considered the response rate. Validity can also be measured by the rate of response to a study (Salimi & Ferguson-Pell, 2017:4).

A low response rate can give rise to sampling bias if the nonresponse is unequal among the participants regarding the outcome (Peytchev, 2013:92). A high response rate (>70%) from a small, random sample is preferable to a low response rate from a large sample (Saleh & Bista, 2017:66 “&” Massey & Tourangeau, 2013:223). However, According to Fosnacht, Sarraf, Howe & Peck (2015:3), low response rates may or may not lead to nonresponse bias because answers to survey items may not differ substantially between responders and nonresponders.

The impact of nonresponse on an estimate depends upon the relationship between the outcome of interest and the decision to participate in the survey. Survey researchers should strive for a response rate of at least 60% (Mokoatle, 2016:34). The study obtained a response rate of 78.30% excluding the pilot sub-region, adequate to generalise the results and thus ensure external validity.

Table 6 gives an indication of the response rate for the questionnaire and the total number of files reviewed per sub-region in relation to the EHP population and total sample.



Table 6: EHP Sample Population & Informal Food Trader File Reviews per Sub-region

Sub-Region	Number of EHPs	Number of EHPs without Informal Food Traders	Questionnaires Disseminated	Questionnaires Received Back	Consent Forms Received Back	Data Collection Checklist Used (Yes/No)	Number of Informal Food Traders	Number of files assessed	Remarks/Comments
SSDA 2 - Swartkoppies	11	1	10	10	10	No	112	0	EHPs have no files only databases
SSDA 3 - Boksburg and Vosloorus	14	1	13	9	9	Yes	197	20	Boksburg - 146 with 14 assessed Vosloorus - 51 but access gained later so 6 assessed
ESDA 1 - Tsakane and Nigel	10	3	7	7	7	No	43	0	EHPs have no files only databases
ESDA 2 - Springs	12	5	7	7	7	Yes	77	8	None
ESDA 3 - Benoni and Brakpan	8	0	8	6	6	Yes	98	14	Benoni - 70 Brakpan - 28 but use 1 file for all 28

Sub-Region	Number of EHPs	Number of EHPs without Informal Food Traders	Questionnaires Disseminated	Questionnaires Received Back	Consent Forms Received Back	Data Collection Checklist Used (Yes/No)	Number of Informal Food Traders	Number of files assessed	Remarks/Comments
NSDA 1 - Tembisa	8	2	6	3	3	No	138	0	EHPs have no files only databases
NSDA 2 - Kempton Park	8	0	8	7	7	Yes	144	15	None
NSDA 3 - Edenvale and Benoni	11	1	10	5	5	Yes	232	23	None
TOTALS	82	13	69	54	54	0	1041	80	

3.9 DATA ANALYSIS

According to Friese (2014:21), data analysis is the most crucial part of any research. Data analysis summarizes collected data. It involves the interpretation of data gathered through the use of analytical and logical reasoning to determine patterns, relationships or trends. Data collected through the questionnaires and data collection checklists was captured in Excel and double entered into a database set up in Epi Info version 3.5.3. Data was imported in Stata version 14 for analysis. Cronbach's alpha statistics to measure the internal consistency of the questions contained in the questionnaire was applied. A Cronbach alpha coefficient of $0.7 < \alpha < 0.8$ was deemed acceptable.

Questions with alpha coefficient of 0.7 and above indicated that the questions were reliable and acceptable. Factor analysis was then carried out in order to refine questions which were correlated. The questions that were included in the factor analysis with an Eigen value of greater than 1.0 were retained in the questionnaire and data collection checklist. Descriptive statistics such as means, frequencies and standard deviations were used to report data. Graphs and tables were used to illustrate the results as appropriate.

3.10 ETHICAL CONSIDERATIONS

Ethics refer to a system of principles that can critically change previous considerations about choices and actions. It is the branch of philosophy which deals with the dynamics of decision-making concerning what is right and wrong (Resnik, 2015). Scientific research work, as in all human activities, is governed by individual, community and social values (Fouka & Mantzorou, 2011:3). Research ethics involve requirements on daily work, the protection of dignity of subjects and the publication of the information in the research, amongst other considerations (Cacciattolo, 2015:62).

The researcher considered these research requirements during the entire research process and the following ethical considerations were adhered to during the study.

3.10.1 Permission

The researcher requested and obtained the permission from the following organisations and committees:

- University of Johannesburg Higher Degrees Committee (**Appendix F**)
- University of Johannesburg Academic Ethics Committee (**Appendix G**)
- Ekurhuleni Health Research Committee (**Appendix E**)
- City of Ekurhuleni Metropolitan Municipality: Divisional Head (**Appendix H**)

3.10.2 Obtaining Informed Consent

In line with the requirements of informed consent, all participants were provided with enough information about any potential benefits and risks pertaining to participation from an informed point of view (Manti & Licari, 2018:146 “&” Nijhawan, Janodia, Muddukrishna, Bhat, Bairy, Udupa & Musmade, 2013:134). According to Koulouriotis (2011:6) informed consent allows for people to be provided with the opportunity to choose what shall or shall not happen to them. Furthermore, Cvetkovic (2016:16) states that, obtaining a person’s informed consent in research is to agree that people have fundamental rights which cannot be devalued or invalidated, as well as to admit that such person possesses human self-worth.

Informed consent was requested from all eligible EHPs to participate in this research study by signing an informed consent form, after having informed them of the aim and objectives of the research. Respondents were also informed that they could at any point withdraw their consent to participate and that the study would not cause them any harm.

3.10.3 Right to Equity, Human Dignity and Protection Against Harm

Steimann (2016:5) asserts that man should never be used as a means to an end, but only as a means in himself and further expresses that in research everyone's inherent human dignity has to be respected and protected universally. In addition, researchers should attempt to ensure that, in all projects that are approved, the human respondents and participants are treated fairly, equitably, are protected and suffer no harm that could have been prevented (Beckmann, 2017:7).

All participants were classified as EHPs and there was no grading of participants in accordance with age and gender. Participants were not exposed to any form of harm in this research. An estimated timeframe of 40 minutes was expected for completion of the questionnaire.

3.10.4 Right to Anonymity, Confidentiality and Privacy

According to Novak (2014:37), privacy is about people, it is a sense of being in control of access that others have when allowed and the right to be protected is in the eye of the participant, not the researcher. Confidentiality as described by Allan (2017:86), on the other hand, is about identifiable data and is an extension of privacy which is seen as an agreement about maintenance and who has access to identifiable data.

The self-reported questionnaire was completed by individual EHPs anonymously, which allowed them as participants to express themselves freely, without duress or undue influence. Each sub-region was given a specific code to allow for responses and findings of the sub-region to be handled confidentially by the researcher. Such responses were not disclosed to other participants, sub-regions and/or management singularly as the aim was not to expose regional performance of EHPs.

The names, addresses and ownership details of document records of informal food trader premises reviewed were handled as highly confidential and were not disclosed to anyone apart from members of the research team, i.e. researcher and

supervisors. The questionnaires and information acquired from the document review will be stored under lock and key for a period of five years after which it will be destroyed. All data collected during the research will be stored securely and only the researcher, supervisor and management of the City of Ekurhuleni Metropolitan Municipality will have access to it. The data collected will be used for academic purposes such as conference presentations and publications.

3.10.5 Right to Community and Community Science

An information letter was used to inform all participants of their right to withdraw at any time during the course of the study and that they may have access to the information collected during the research through management structure of the City of Ekurhuleni Metropolitan Municipality: Health and Social Development Department – Environmental Health Division.

The respondents may access any information pertaining to this research and the results of this research through the management of Ekurhuleni Metropolitan Municipality following the completion of the study. Dissemination of research findings includes presentations at key meetings, conferences and publications in sources likely to be accessed by the targeted audience (Adams, 2013, Designing ethical research studies, para.5). In the event of the existence of any adverse findings that pose a threat to human health, it shall be reported to the management of the City of Ekurhuleni Metropolitan Municipality Health and Social Development Department, Environmental Health Division by the researcher to ensure the right to community is protected.

3.11 RESEARCH LIMITATIONS

As it is for every study, limitations to research are existential (Langkos, 2014:10). This research had the following recorded limitations:

- There were several postponements in allocated dates for briefing of potential respondents, which resulted in delays in the data collection process. These delays were caused by a lack of availability of EHPs during allocated collection dates. This however, did not affect the research outputs or hinder the response rate.
- This further caused delays in collection of questionnaires as a result of several return trips being necessary for collection of all retrieved questionnaires. These delays were caused by a lack of availability of EHPs during allocated collection dates. This however, did not affect the research outputs or hinder the response rate.
- Some regions did not have informal food trader files in place. This voided the use of the data collection checklist in those sub-regions. This also reduced the overall response percentage for the checklist as a data collection tool. However, more sub-regions had files in place, than there were sub-regions without files in place.
- There was no qualitative observation considered as a means of data collection. This could have been done through inspections where the researcher accompanies a sample of EHPs to observe actual practices during the inspection of informal food traders. Using an additional qualitative approach such as observations of EHPs during preparation, inspection and recording of findings could have enhanced and better described the EHPs practices, over and above the two methods used in this study and this could have further assisted in strengthening the hypothesis for this research study.

3.12 SUMMARY

This chapter gave a detailed description of the quantitative research design used, the sampling techniques followed for the population utilised, the research instruments actioned and the manner in which data was collected using the self-reported questionnaire and the data collection checklist. Furthermore, this chapter detailed how the data was captured and analysed using EPI info statistical package,

as well as outlined all ethical considerations made concerning approvals and consent.



4. CHAPTER FOUR: RESULTS, INTERPRETATION AND DISCUSSION

4.1 INTRODUCTION

This chapter presents the full report on the results and the findings obtained in this study. All the information gathered from the self-reported questionnaires will be discussed and broken down into three key areas, including; general and area characteristics of the study participants; data on the knowledge of EHPs inspecting informal food traders; and data on the practices of EHPs inspecting informal food traders. The focal area of the data from the data collection checklist will be discussed as it relates to the practices of EHPs and the record keeping components related to these practices. The information will further be condensed and demonstrated in Table formats and various graphs. An interlink will also be created and discussion parallels made with other studies where applicable.

4.2 GENERAL CHARACTERISTICS OF STUDY PARTICIPANTS

To fit the eligible criterion of the study, participants were required to indicate whether they had been involved in the inspection of informal food traders and were currently occupying EHP positions, of which Fifty-four EHPs completed the questionnaire and met this criterion. This made up 78.30% of the study population.

The general characteristics that were explored include years of work experience, highest qualification, area of jurisdiction and initial contact with informal food traders. Table 7 shows that the majority of the EHPs had worked between (10-15) years at 38.89%, with 29.93% having worked longer than 15 years, whilst 14.81% had worked between (0-5) years and the minority at 12.81% had worked between (5-10) years.

The highest level of academic qualification obtained by EHPs is predominantly a four year B-Tech Environmental Health degree at 74,07%, with 20.37% having obtained a three year national diploma and 5.56% were at Master's degree level. Findings from a study by Schmidt, Outerbridge & Hunter (2014:432) supports the

conclusion that when job experience is held constant, the direct impact of ability on the acquisition of job knowledge increases substantially, and this, in turn, increases the indirect effect of ability on job performance.

While Ng & Feldman (2009:89) and Faith (2014:23) found that education level and academic qualification positively influence core task employee performance by providing individuals with more declarative and procedural knowledge and skills with which they can complete their tasks successfully with less time. The high percentage of post academic qualification by EHPs can be attributed to the requirement by the Health Professions Council of South Africa, where EHPs are to continually develop professionally while practising (Health Professions Act, 1974). However, the HPCSA does not prescribe a type of post qualification as compulsory, so it is encouraging to have identified that EHPs are keen to further their studies with postgraduate qualifications that are an advancement that is likely to add to the body of existing Environmental Health knowledge.

Table 7: Experience and Qualifications of the Study Participants (N=54)

Characteristics	Frequency (n)	Percentage (%)
<i>Years of experience in the current position</i>		
0 – 5 years	8	14.81
5 – 10 years	7	12.96
10 – 15 years	21	38.89
> 15 years	16	29.93
Missing	1	1.85

Characteristics	Frequency (n)	Percentage (%)
<i>Highest qualification</i>		
3-year National Diploma	11	20.37
4-year B-Tech Degree	40	74.07
Master's Degree	3	5.56

Table 8 demonstrates the area characteristics of the study respondents. It starts with the distribution of EHPs throughout the three regions and eight sub-regional offices. The highest response was received from the Eastern Region at 37.04%, followed by the Southern Region at 35.19% and the lowest response from the Northern Region at 27.78%. Further distribution of respondents at sub-regional level was highest in SSDA 2 (South 2) at 18.52% and lowest in NSDA 1 (North 1) at 5.56%.

Within the specific area offices, the majority of the EHPs had worked between (10-15) years at 35.19%, 24.07% had worked between (0-5) years, and a slight deviation in the length of time worked between those that had worked longer than 15 years and between (5-10) years was recorded, with 20.37% and 18.52% respectively. The duration of time spent in the designated area of jurisdiction may influence the familiarity with the area in which inspections are done and may assist in the identification of new food premises such as informal food traders within an area. Furthermore, the length of time in which an EHP works in an area may influence the types of relations formed with food premises managers such as informal food traders, perhaps assisting with rapport, training implementation, compliance and inspection procedures.

Table 8: Area Characteristics of the Study Participants (N=54)

Characteristics	Frequency (n)	Percentage (%)
<i>Region</i>		
North	15	27.78
South	19	35.19
East	20	37.04
<i>Area</i>		
North 1	3	5.56
North 2	7	12.96
North 3	5	9.26
South 2	10	18.52
South 3	9	16.67
East 1	7	12.96
East 2	7	12.96
East 3	6	11.11
<i>Duration in Designated Area</i>		
0 – 5 years	13	24.07
5 – 10 years	10	18.52
10 – 15 years	19	35.19
> 15 years	11	20.37
Missing	1	1.85

Interestingly, as shown in **figure 2**, EHPs operate in different types of areas and service various types of communities, with 65% of areas described as townships. Figure 2 further shows that residential suburban areas constitute 20% of the juristic areas, 31.48% are informal settlements and the rest are either Central Business Districts (CBD) at 20.37% or industrial at 18.52%. This indicates that informal food traders are sparsely distributed within the City of Ekurhuleni Metropolitan Municipality and are present in different types of area settings.

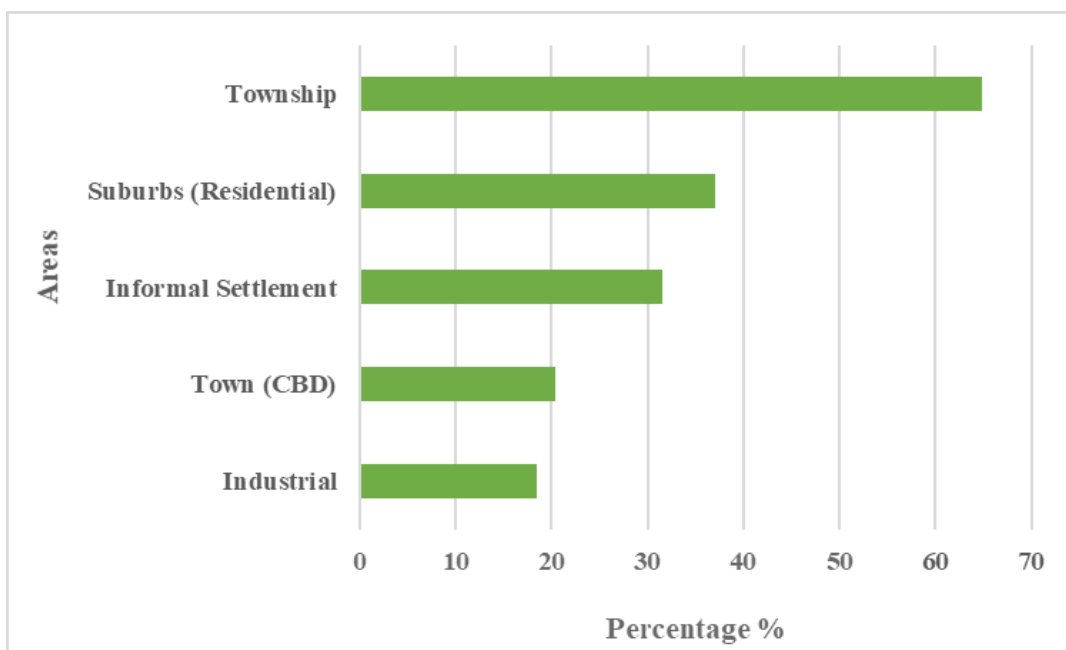


Figure 2: Description of Areas Serviced by EHPs (N=54)

EHPs become aware of new informal food traders in their area of jurisdiction through various means, as shown in **figure 3**. However, the majority of EHPs at 94,44% become aware of informal food traders operating in their areas when driving through their areas. This is a strong indicator that EHPs are well acquainted with their areas and are able to identify new market informal food trader entrants. Complaints directed at EHPs about informal food traders operating in their areas account for 50%. This may indicate that community members are cognisant of food safety legislation and licensing requirements that informal food traders have to acquire prior to trading.

Consultations by informal food traders to EHP offices account for 46.30%, closely followed by referral of informal food traders from other departments and stakeholders at 38.89%. This indicates that there is fair visibility and awareness around EHP offices and accessibility of EHPs for consultative purposes by informal food traders. This further indicates that departments and stakeholders are aware of the role that EHPs play in relation to informal food trader inspections and certification, therefore informal food traders are referred to EHPs.

Environmental Health Practitioners also work with other departments and stakeholders during joint operations, with 37.04% of EHPs becoming aware of informal food traders during these integrated collaborative compliance efforts.

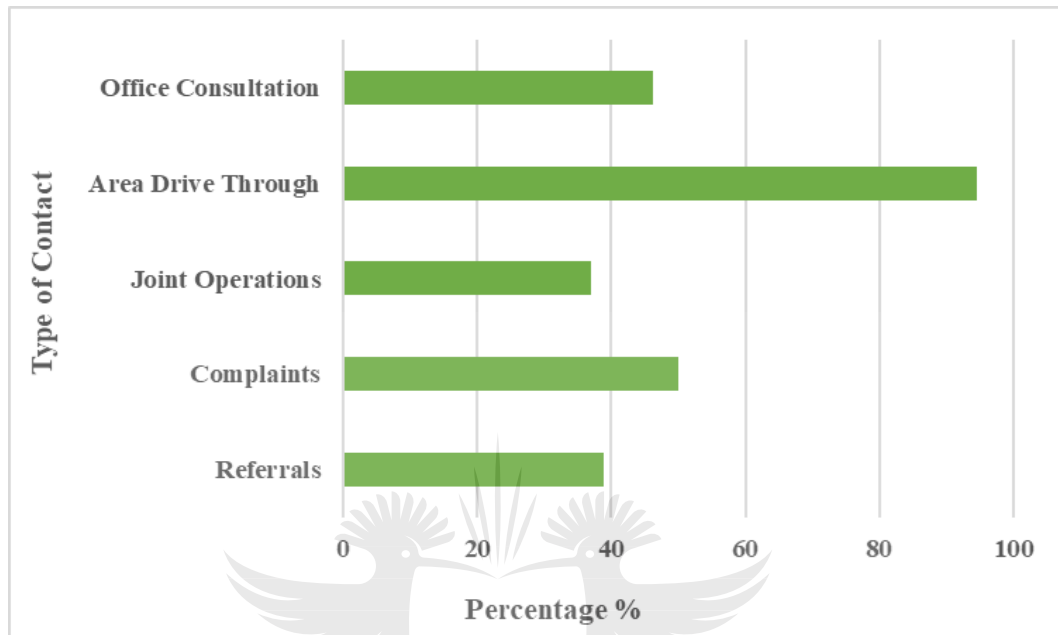


Figure 3: EHPs First Contact to Informal Food Traders (N=54)

Figure 4 shows that there is a diversification in the type of structures and vehicles that EHPs come into contact with in their areas of jurisdiction, used by informal food traders. use within the EHP's areas of jurisdiction. The predominant structure that EHPs are exposed to within the City of Ekurhuleni is a tent or gazebo at 70.73%, closely followed by stalls at 66.67%, mobile kitchens or trailers at 55.56% and caravans at 50.94%. The other type of structure that informal food traders use within the juristic areas of EHPs includes carts, at a minimal 7.41%. The type of structure that informal food traders use may affect the manner in which the inspection is approached by the EHP, including the degree to which an inspection is comprehensive and detailed, the degree of applicability of certain conditions within the relevant regulations or the length of time spent to conduct the inspection. There is a concern in that 7.41% of the EHPs indicated that within their juristic areas there are informal food traders that operate without any visible structure.

This is contrary to the requirements as specified in R638 of 2018, which states that food premises shall be designed, constructed and be so equipped so as to effectively protect food against contamination or spoilage by any physical, chemical, biological agents or pollution of any kind. EHPs are expected to enforce these regulations as part of their inspection mandate.

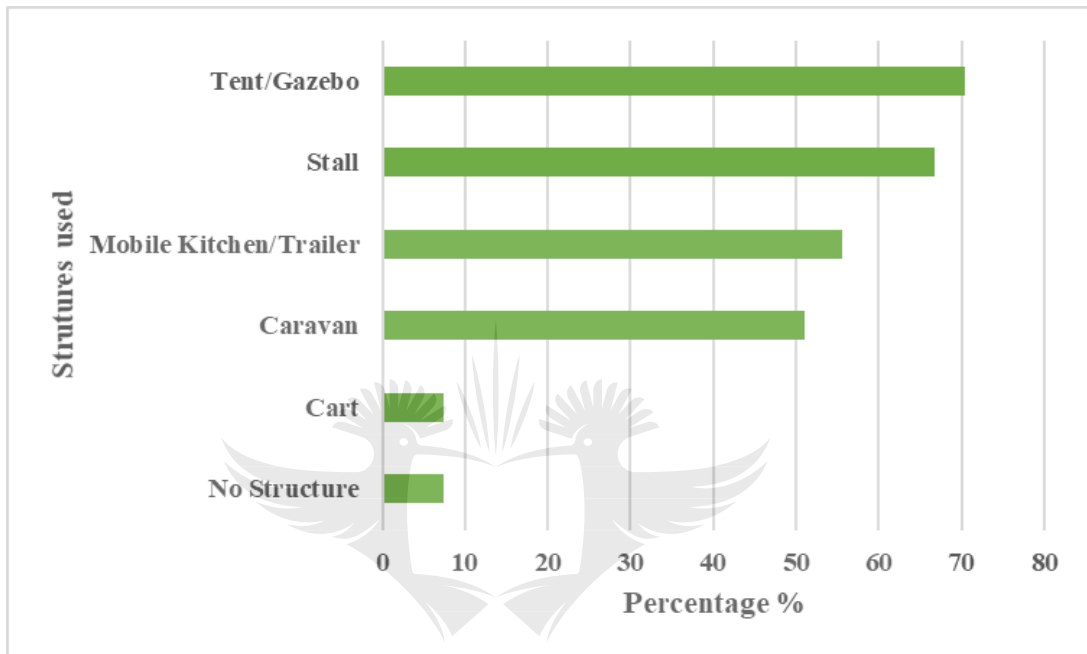


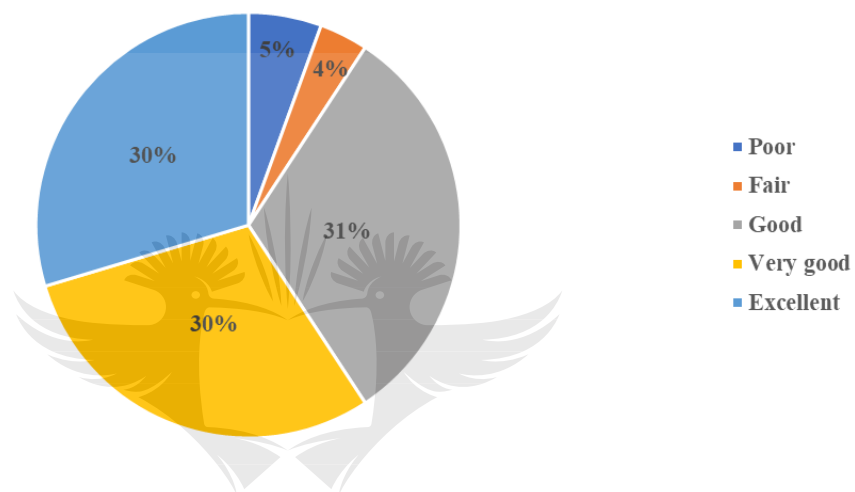
Figure 4: Structures Used by Informal Food Traders in the City of Ekurhuleni Metropolitan Municipality

Having a better understanding of the general characteristics of EHPs is of great value as it is an indication of the dynamics of Environmental Health features as they relate to informal food traders within their diverse areas of jurisdiction.

4.3 KNOWLEDGE OF EHPs INSPECTING INFORMAL FOOD TRADERS

4.3.1 Self-rating of Informal Food Trader Inspections

Figure 5 depicts the way EHPs rated their knowledge of informal food trader inspections, with 31.48% rating their knowledge as good. Those EHPs rating their knowledge as excellent and very good was equal at 29.63%. On the lower end of the rating scale, 5.56% rated themselves as poor and 3.7% as fair.



**Figure 5: Knowledge Rating Regarding Informal Food Trading Inspection
Among EHPs (N=54)**

4.3.2 Knowledge of Informal Food Trading Definition

Despite the EHPs individual rating above, **figure 6** below shows that based on the options offered for the definition of informal food trading; only 48.15% selected the fully correct definition. EHPs that chose the partially correct definition were at 44.44% and 3.70% didn't know the definition of informal food trading. This is concerning, as custodians of food safety inspections under the municipal health service function of food control, EHPs should be able to differentiate informal food traders from other types of food premises, and this starts with understanding and knowing the definition.

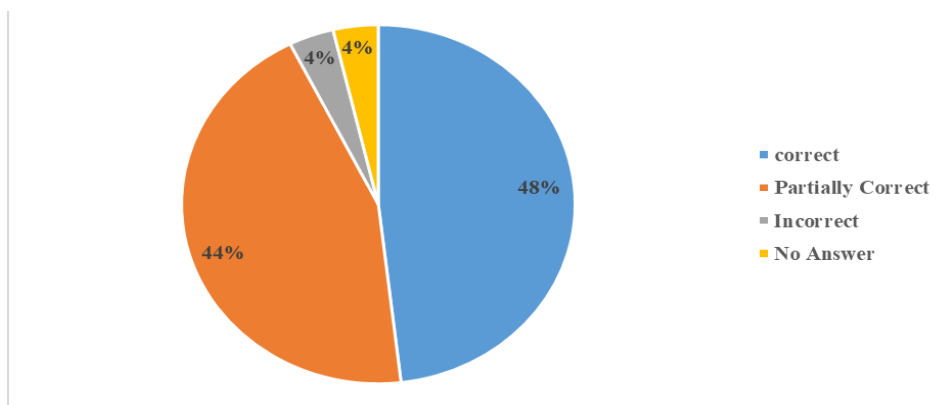


Figure 6: Knowledge of Definition of Informal Food Trading by EHPs (N=54)

4.3.3 Knowledge of Informal Food Trading Legislation

There are several pieces of legislation that are important for the inspection of informal food traders (refer to **Table 2** and **3**). EHPs were requested to indicate the importance of each legislation for the inspection of informal food traders. As highlighted in **Table 9** below, the degree of importance was highest for R962 at 83.33%, followed by the FCD Act at 81.48%. EHPs know these 2 pieces of legislation are key. R962 gives permission to the informal food trader to handle food for the purpose of selling or donating whilst the FCD Act is all encompassing of food legislation with over 50 regulations related to food safety promulgated thereunder. The EHPs rated the Ekurhuleni Metropolitan Municipality Public Health bylaws as very important at 70.37%, followed by the National Health Act 68.52%.

The EMM Public Health bylaws are central to the prevention of any public health nuisance within the boundaries of the City of Ekurhuleni Metropolitan Municipality, giving EHPs the powers to issue judicial fines to perpetrators. This creates a contrast with the below ratings of the extent to which EHPs considered informal food trading as a public health concern, where only 31% considered informal food trading as a public health concern to a very large extent (see figure 10).

The NHA was promulgated to provide a framework for a structured uniform health system within the Republic of South Africa (RSA). As it pertains to informal food traders, the NHA addresses the appointments of EHPs, inspections as per scope of practice, investigations and compliance monitoring. It's no wonder that 68.52% of the EHPs rated the NHA as very important and 20.37% rated it as important. The 1.85% considering the NHA as not important and 1.85% as neutral on its importance reflects a lack knowledge of this legislation by this minority.

The National Environmental Health Norms and Standards, which were promulgated under the NHA was rated by the EHPs as being very important at 62.69%. These guidelines focus less on food safety standards, but are pivotal for guiding EHPs on frequency of inspections, with a majority of requirements being similar to the EMM Public Health bylaws. Notwithstanding that the Constitution of the RSA is the supreme law and cornerstone of all legislation within the RSA, 59.26% considered it as very important, 20.37% considered it as important, 11.11% were neutral on its degree of importance and 1.85% felt it was not important at all as it pertains to the inspections of informal food traders.

The EMM Informal and Street Trading Policy and Management Framework is an internal document which was put into place via a Council Resolution, dealing with departmental roles and collaborations, stakeholder engagements and describes the licensing and certification of informal traders within the City of EMM. However, only 35.19% rated it as very important, with 29.63% rating it as important, 25.93% were neutral, 1.85% rated it as not important and 1.85% rated it as not important at all. The legislation contained within **Table 9** are important for the inspection of informal food traders as they contain within them important sections that guide EHPs and give EHPs the powers to act when conducting inspections and practising as law enforcers. However, there is a lack in the consistency with which each legislation is considered important. Furthermore, under the section on practices there will be discussions around how often EHPS refer to these laws when inspecting informal food traders.

Table 9: Rating of important legislation (N=54)

RATING OF IMPORTANT LEGISLATIVE DOCUMENTS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Not important at all [n%]	Not important [n%]	Neutral [n%]	Important [n%]	Very important [n%]	Missing [n%]
The Constitution of the Republic of South Africa (Act 108 of 1996)	1 1.85%	0 0%	6 11.11%	11 20.37%	32 59.26%	4 7.41%
The Business Act (Act 71 of 1991)	4 7.41%	4 7.41%	13 24.07%	15 27.78%	13 24.07%	5 9.26%
The National Health Act (Act 61 of 2003)	1 1.85%	0 0%	1 1.85%	11 20.37%	37 68.52%	4 7.41%
National Norms and Standards for Premises and Acceptable Monitoring Standards for Environmental Health Practitioners (Notice 1229 of 24 December 2015)	1 1.85%	1 1.85%	2 3.70%	14 25.93%	35 62.96%	2 3.70%
Regulations Defining the Scope of the Profession of Environmental Health (R698 of 26 June 2009)	1 1.85%	0 0%	4 7.41%	15 27.78%	31 27.78%	3 5.56%
The Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972)	1 1.85%	0 0%	0 0%	9 16.67%	44 81.48%	0 0%

RATING OF IMPORTANT LEGISLATIVE DOCUMENTS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Not important at all [n%]	Not important [n%]	Neutral [n%]	Important [n%]	Very important [n%]	Missing [n%]
Regulations Governing the General Hygiene Requirements for Food Premises and the Transport of Food (R962 of 23 November 2012)	0 0%	0 0%	1 1.85%	7 12.96%	45 83.33%	1 1.85%
Regulations Relating to the Powers and Duties of inspectors and analysts conducting inspections and analyses at Food Premises (R328 of 20 April 2007)	0 0%	0 0%	4 7.41%	14 25.93%	35 64.81%	1 1.85%
The Codex Alimentarius – The Recommended International Code of Practice, General Principles for Food Hygiene International, CAC/RCP (3-1997)	1 1.85%	0 0%	10 18.52%	22 40.74%	14 25.93%	4 7.41%
The Ekurhuleni Metropolitan Municipality Public Health Bylaws [COUNCIL RESOLUTION: A-ET (01-2009) 23 September 2009]	0 0%	0 0%	2 3.70%	10 18.52%	38 70.37%	4 7.41%
The Criminal Procedure Act (Act 51 of 1977)	4 7.41%	4 7.41%	14 25.93%	15 27.78%	13 24.07%	4 7.41%
Ekurhuleni Metropolitan Municipality Policy: Informal and Street Trading Policy and Management Framework, ITEM B-ED (07-2008)	1 1.85%	1 1.85%	14 25.93%	16 29.63%	19 35.19%	0 0%

4.3.4 Knowledge on Frequency of Inspection Sources

To gain insight on whether EHPs have knowledge on the sources that determine the frequency with which informal food trader inspections should be conducted, the self-reported questionnaire enquired as to what informed how often they inspect informal food traders. The description is shown in **figure 7**. The highest proportion of EHPs, at 59.26% attributed their frequency of inspection to the EMM service standards, which outline after how long different types of premises should be inspected. Interestingly, 55.56% were informed by their personal work experience and discretion. This may be considered a loophole as there are variations in work experience; and personal discretion is a subjective matter. According to Young (2011:22) discretion can only be interpreted as those decisions that are made with lawful authority and the individuals within an institution must operate under the constraints acceptable to others within the organization or profession.

Personal discretion may result in inconsistencies relating to how often informal food traders are inspected by EHPs. Legislation accounted for 40,74%, followed by policy at 33.33%. This is a concern, as the legislative National norms and standards for premises and monitoring standards for EHPs provide prescriptions that food premises should be inspected a minimum of once every three months. Furthermore, there is no municipal policy that prescribes any frequency for the inspection of informal food traders by EHPs. The standard operating procedure (SOP) for the inspection of informal food trader frequency accounted for 24.07%. The discretion of the EHPs' supervisor informed 11.11% of the EHPs frequency of inspection whilst the guidance by EHP colleagues accounted for 9.26%.

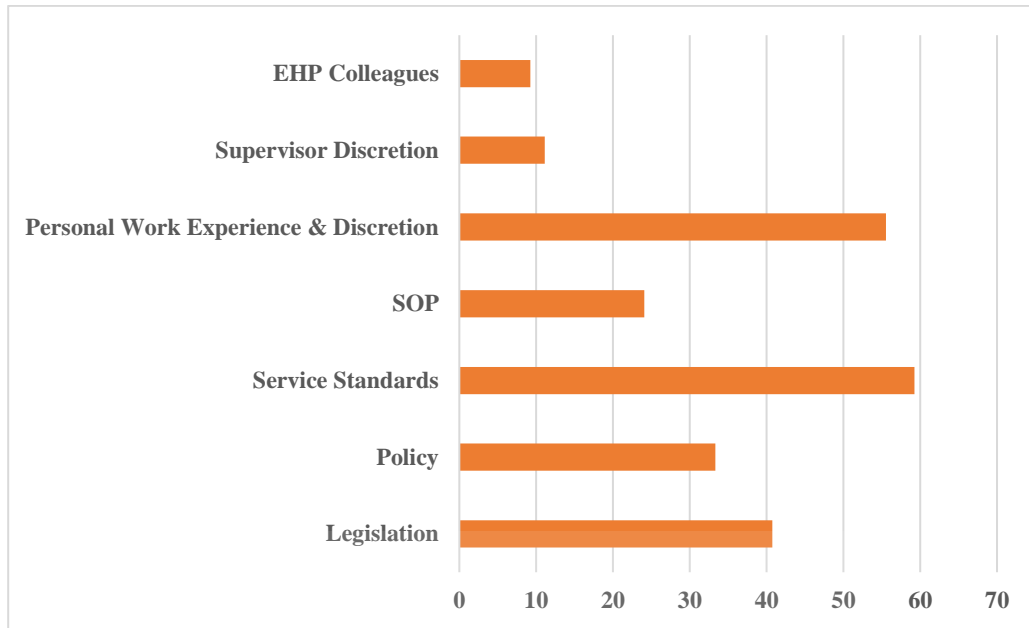


Figure 7: Sources Informing EHPs inspection Frequency of Informal Food Traders (N=54)

4.3.5 Knowledge of Inspection Steps

For any Environmental Health inspection, section 81 of the National Health Act outlines some powers that inspectors have; however, usually adaptive standard operating procedures (SOP) give important steps that need to be followed to ensure effectiveness and efficiency of that inspection. To determine the EHPs knowledge of the applicable steps for the inspection of informal food traders, EHPs were requested to rate the level of importance of each step as highlighted in **Table 10** below. With the exception of setting up an appointment with the informal food trader; and providing a follow-up date of inspection where EHPs considered it as very important at 14.81% and 35.19% respectively, all other steps were rated with high degrees of importance.

The steps that stand out as very important for the inspection of EHPs include the introduction of the EHP to the informal food trader at 83.33%; explaining the purpose of the inspection to the informal food trader at 85.19% and presenting the EHP's appointment card at 75.93%.

Checking whether the informal food trader is in possession of a COA was rated as very important at 70.37%; giving health education at 87.04%; measuring the temperature of the ready-to-eat food at 64.81%; providing feedback of the outcome of the inspection to the informal food trader at 74.07% and recording the details of the inspection in a file at 61.11%.



Table 10: Rating of important inspection steps (N=54)

RATING OF IMPORTANT STEPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Not important at all [n%]	Not important [n%]	Neutral [n%]	Important [n%]	Very important [n%]	Missing [n%]
Setting an appointment with the informal food trader	13 24.07%	13 24.07%	4 7.41%	11 20.37%	8 14.81%	5 9.26%
Consulting with relevant departments regarding the informal food trader	0 0%	3 5.56%	4 7.41%	26 48.15%	20 37.04%	1 1.85%
Consulting with relevant stakeholders regarding the informal food trader	0 0%	1 1.85%	8 14.81%	24 44.44%	20 37.04%	1 1.85%
Introducing yourself to the informal food trader	0 0%	0 0%	0 0%	8 14.81%	45 83.33%	1 1.85%
Explaining the purpose of the inspection to the informal food trader	0 0%	0 0%	0 0%	7 12.96%	46 85.19%	1 1.85%

RATING OF IMPORTANT STEPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Not important at all [n%]	Not important [n%]	Neutral [n%]	Important [n%]	Very important [n%]	Missing [n%]
Presentation of appointment card	0 0%	0 0%	1 1.85%	10 18.52%	41 75.93%	1 1.85%
Checking whether the informal food trader is in possession of certificate of acceptability	0 0%	1 1.85%	0 0%	12 22.22%	38 70.37%	3 5.56%
Using an inspection checklist to check compliance	0 0%	0 0%	6 11.11%	14 25.93%	32 59.26%	2 3.70%
Giving health education	0 0%	0 0%	0 0%	5 9.26%	47 87.04%	2 3.70%
Measuring the temperature of the ready-to-eat food	1 1.85%	0 0%	1 1.85%	16 29.63%	35 64.81%	1 1.85%
Recording the temperature of the ready-to-eat food	1 1.85%	0 0%	2 3.70%	17 31.48%	32 59.26%	2 3.70%

RATING OF IMPORTANT STEPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Not important at all [n%]	Not important [n%]	Neutral [n%]	Important [n%]	Very important [n%]	Missing [n%]
Collecting food samples	0 0%	1 1.85%	3 5.56%	16 29.63%	33 61.11%	1 1.85%
Providing feedback of the outcome of the inspection to the informal food trader	0 0%	0 0%	2 3.70%	11 20.37%	40 74.07%	1 1.85%
Providing a follow-up date of inspection to the informal food trader	8 14.81%	6 11.11%	6 11.11%	12 22.22%	19 35.19%	3 5.56%
Instituting legal action when compliance is not met	0 0%	1 1.85%	4 7.41%	16 29.63%	31 57.41%	2 3.70%
Recording the details of the inspection in a file	0 0%	1 1.85%	0 0%	17 31.48%	33 61.11%	3 5.56%

Under the section on practices there will be discussions around how often EHPS implement these steps, with a further look at whether there are document records in informal food trader files that support this implementation.

4.3.6 Knowledge on Department and Stakeholder Inspectorates

According to the EMM Informal Trading Policy and Management Framework, there are a number of departments and stakeholders that are involved in the management of informal traders; however, outside of Environmental Health only two departments are mandated to inspect informal food traders, namely Ekurhuleni Metropolitan Police Department (EMPD) and the Economic Development Department (EDD). To assess the EHPs knowledge of this, they were given a list of all departments within the City of EMM and requested to indicate the departments that they know to inspect informal food traders. Positively, 79.63% correctly indicated that EMPD inspects informal food traders.

Only 50% correctly chose the Economic Development Department as a department that inspects informal food traders. Interestingly, all other departments that do not inspect informal food traders were selected, with 53.70% indicating that they know the Customer Relations Management Department to be responsible for informal food trader inspections, 50% choosing the City Planning and Development Department and 20% choosing the Building Control Department. Surprisingly, 44.44% of EHPs indicated that hawker's associations are also responsible for the inspection of informal food traders. **Figure 8** gives a full list of departments and percentage per department or stakeholder. This indicates that EHPs are not well versed and knowledgeable with regards to all the departments that conduct inspections of informal food traders.

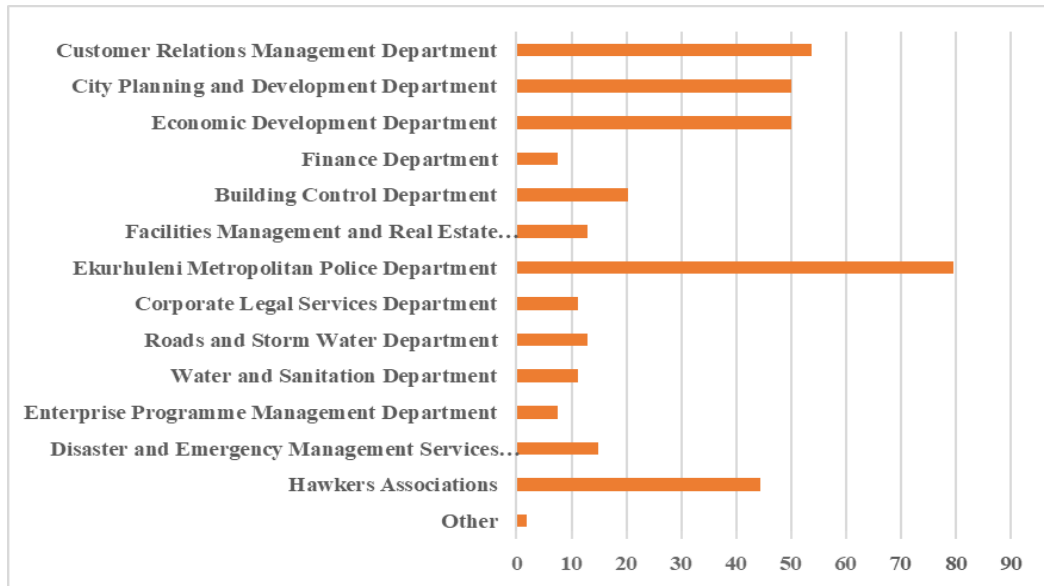


Figure 8: Departments and Stakeholders Known to Inspect Informal Food Traders excluding Environmental Health

4.3.7 Training of EHPs

As a way to gaining insight into EHPs knowledge and competence as it relates to informal food trader inspections, the self-reported questionnaire collected information of participants' recent history of training and whether they believed they had been sufficiently trained to perform this function effectively. As depicted in **figure 9**, a mere 37.04% indicated that they had undergone training related to the inspection of informal food traders, however, 74.09% of the EHPs indicated that they considered themselves to not be sufficiently trained. This indicates a gap that requires action.

The summary report from the National Department of Health (2002) states that with proper training and control of informal food trading, the potential health hazards of street foods are minimized. This is supported by Kok & Balkaran (2014:189). However, the challenge here is that if EHPs consider themselves to not be sufficiently trained, it is suitable to question the effectiveness of the training and health education that they offer to informal food traders.

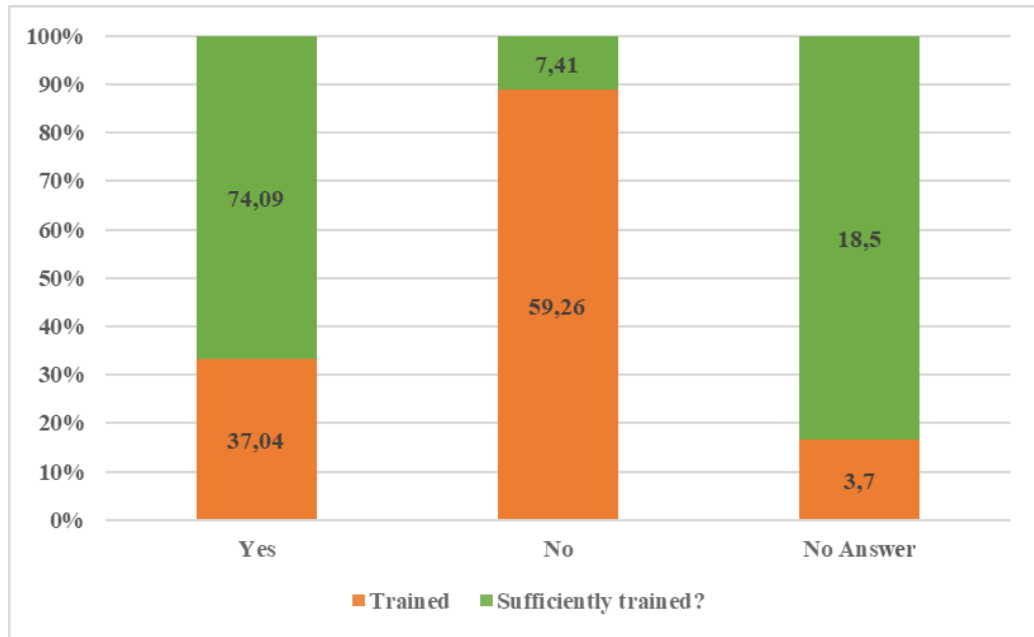


Figure 9: EHPs Trained vs EHPs Considering Themselves Sufficiently Trained to Inspect Informal Food Traders

4.3.8 Extent of Public Health Concern

Even though WHO made a call to action emphasizing the need to identify and address informal food trading as a public health concern (Chukuezil, 2010:50), **figure 10** shows 6% of EHPs perceived informal food trading to be a public health concern only to a small extent and 20% to a medium extent. Conversely, it is positive that 31% of EHPS consider informal food trading a public health concern to a very large extent, with 41% considering it to a large extent as a public health concern.

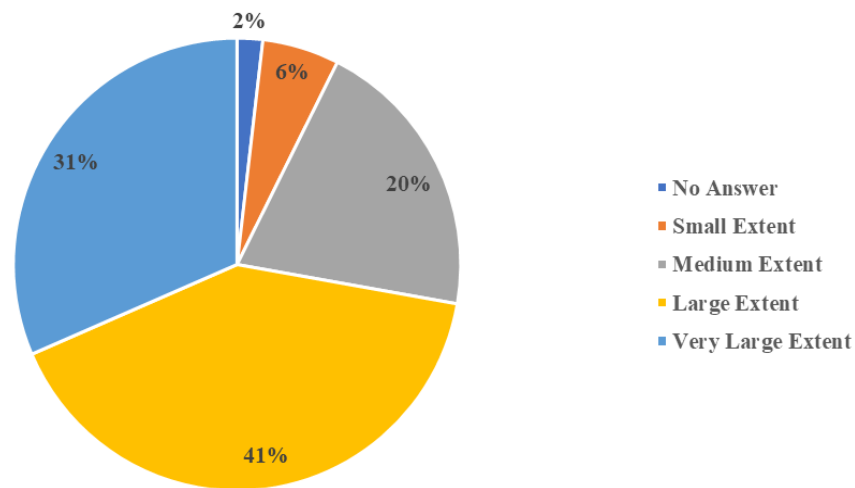


Figure 10: Extent to which Informal Food Trading is Considered a Public Health Concern (N=54)

The above findings highlighted uncertainty and mixed levels of knowledge with regards to the inspection of informal food traders. The following section focusses largely on the implementation of these practices by EHPs.

4.4 PRACTICES OF EHPs INSPECTING INFORMAL FOOD TRADERS

The results recorded and discussed hereunder were taken from the completed self-reported questionnaires and sought to discover whether there is a standardised document that informs EHPs' actions. Furthermore, it sought to reveal the actions that EHPs take prior, during and following the inspection of informal food traders.

4.4.1 Standards Operating Procedure for Informal Food Trader Inspections

The EHPs were requested to indicate whether they made use of a SOP for the inspection of informal food traders (See **figure 11**). The majority of EHPs at 51.85% indicated that there is no SOP in place and therefore they cannot make use of one, 5.56% said they do not make use of it as it is not necessary, with 3.7% saying that they do not use it as it is not user friendly.

In contrast, 33.33% said that they make use of a SOP for the inspection of informal food traders within their area of jurisdiction. This inconsistency is a concern. According to the Clinical Research Resource HUB (2015), a SOP assures execution of tasks in accordance with institutional, local, provincial and national guidance by containing adequate detail to clearly guide staff through a particular procedure and thereby establish uniformity in the everyday functions of the department. An SOP also helps avert any existing deviations.

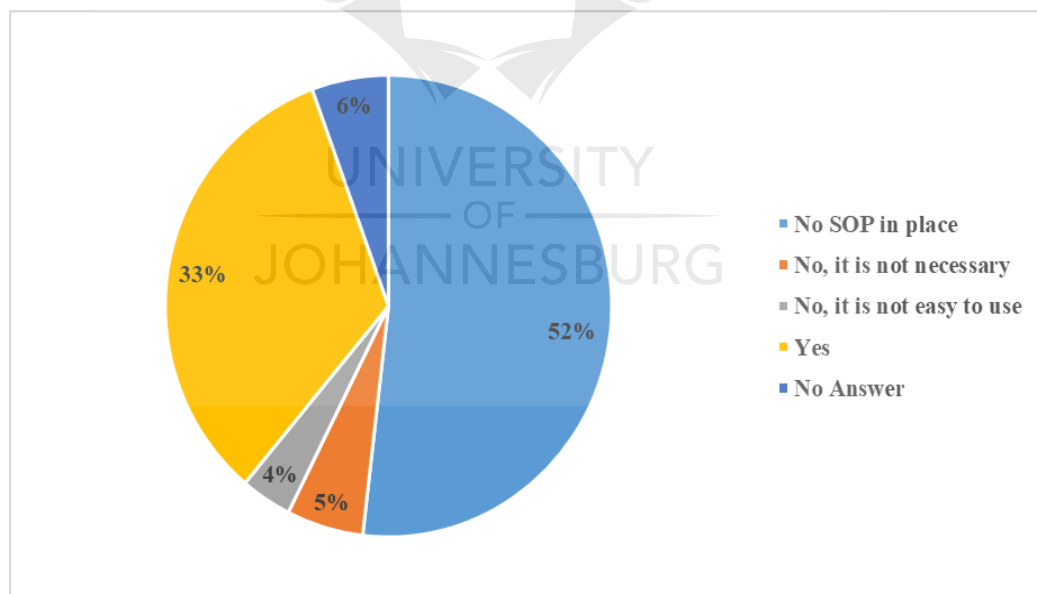


Figure 11: EHPs Using SOP for Inspection of Informal Food Trading by EHPs (N=54)

4.4.2 Usage of Legislative Documents

To demonstrate the rate of use of legislative documents that relate to the inspections of informal food traders, 64.81% of EHPs indicated that the R962 was always referred to, with 14.81% referring to it often and 5.56% referring to it sometimes. These are the regulations that grant permission for an informal food trader to handle and sell food. The Foodstuffs, Cosmetics and Disinfectants Act, as well as the EMM Public Health Bylaws were equally, always referred to by 57.41% of the EHPs. From a cross tabulation between the referral to legislation during inspection of informal food traders (**Table 11**) and the rating of importance of legislation (**Table 9**) there is a direct relationship between the importance rating of the 3 above mentioned legislation with the frequency of referral to them.

However, there is no direct relationship between the importance rating of the Business Act, the Criminal Procedure Act and the CAC as there was a high percentage of EHPs who indicated that they never refer to these legislative documents for the inspection of informal food traders, at 48.15%, 35.19% and 29.63% respectively. Again, despite the Constitution of the RSA being the supreme law in the RSA, only 38.88% of EHPs always refer to this document for the inspection of informal food traders, with 11.11% often doing so, 9.26% sometimes referring, 14.81% rarely referring and 11.11% never referring to it.

This finding highlights that even though EHPs may consider and know a particular set of legislation to be very important for the inspection of informal food traders, they are not necessarily going to always use it by referring to its practices and guidelines.

Table 11: Frequency of referral to legislation (N=54)

FREQUENCY OF REFERRAL TO IMPORTANT LEGISLATIVE DOCUMENTS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
The Constitution of the Republic of South Africa (Act 108 of 1996)	6 11.11%	8 14.81%	5 9.26%	6 11.11%	21 38.88%	8 14.81%
The Business Act (Act 71 of 1991)	26 48.15%	7 12.96%	4 7.41%	3 5.56%	6 11.11%	8 14.81%
The National Health Act (Act 61 of 2003)	2 3.70%	1 1.85%	5 9.26%	8 14.81%	29 53.70%	9 16.66%
National Norms and Standards for Premises and Acceptable Monitoring Standards for Environmental Health Practitioners (Notice 1229 of 24 December 2015)	5 9.26%	4 7.41%	4 7.41%	5 9.26%	24 44.44%	12 22.22%
Regulations Defining the Scope of the Profession of Environmental Health (R698 of 26 June 2009)	3 5.56%	7 12.96%	6 11.11%	6 11.11%	20 37.04%	12 22.22%

FREQUENCY OF REFERRAL TO IMPORTANT LEGISLATIVE DOCUMENTS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
The Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972)	1 1.85%	1 1.85%	1 1.85%	12 22.22%	31 57.41%	8 14.81%
Regulations Governing the General Hygiene Requirements for Food Premises and the Transport of Food (R962 of 23 November 2012)	0 0%	0 0%	3 5.56%	8 14.81%	35 64.81%	8 14.81%
Regulations Relating to the Powers and Duties of inspectors and analysts conducting inspections and analyses at Food Premises (R328 of 20 April 2007)	1 1.85%	6 11.11%	5 9.26%	9 16.66%	25 46.30%	8 14.81%
The Codex Alimentarius – The Recommended International Code of Practice, General Principles for Food Hygiene International, CAC/RCP (3-1997)	16 29.63%	7 12.96%	7 12.96%	7 12.96%	8 14.81%	9 16.66%
The Ekurhuleni Metropolitan Municipality Public Health Bylaws [COUNCIL RESOLUTION: A-ET (01-2009) 23 September 2009]	0 0%	1 1.85%	7 12.96%	4 7.41%	31 57.41%	11 20.37%
The Criminal Procedure Act (Act 51 of 1977)	19 35.19%	5 9.26%	9 16.66%	6 11.11%	5 9.26%	10 18.52%
Ekurhuleni Metropolitan Municipality Policy: Informal and Street Trading Policy and Management Framework, ITEM B-ED (07-2008)	16 29.63%	7 12.96%	9 16.66%	7 12.96%	8 14.81%	7 12.96%

4.4.3 EHPs Inspection Frequency of Informal Food Traders

In looking at how often EHPs inspect informal food traders, they were requested to indicate this frequency. As shown in **Table 13**, 31.48% said they inspect informal food traders every second month, 25.93% every third month and 24.07% on a monthly basis. This is positive as it shows that 81.48% of the inspection frequency is in line with the National Norms and Standards for Premises and Monitoring Standards for EHPs, which indicates that food premises should be inspected every quarter. Furthermore, this may show a correlation between how often EHPs inspect informal food traders and the extent to which informal food trading is regarded to be a public health concern to them (refer to **figure 10**).

However, the EMM service standards indicates that food premises should be inspected at least once every month, with only 24.07% of EHPs complying with this municipal standard. This may be difficult to achieve as the National Environmental Health Policy emphasises that there should be one operational EHP provided for every 10000 population, however according to the 2017/2018 City of EMM Health and Social Development Report the ratio of the City of EMM is currently 1:32000. This highlights a great EHP staff shortage and presents a challenge for meeting certain inspection standards.

Table 12: Frequency of Informal Food Trader Inspections (N=54)

Inspection Frequency	Frequency (n)	Percentage (%)
Monthly	13	24.07
Every two months	17	31.48
Quarterly	14	25.93
Every six months	3	5.56
Once a year or less	2	3.70
Missing	6	11.11

4.4.4 Steps Applied in the Inspection Process

Table 13 contains some steps that the researcher enquired about in order to determine what was done prior and during an inspection, and how often such was done by the EHPs. A cross tabulation was then done with **Table 10** in an effort to compare the importance rating to the rate of implementation. Although the setting up of an appointment with the informal food trader is not prescribed by any piece of legislation, 14.8% of EHPs always do so, while 12.96% often do, 24.07% sometimes set it, 12.96% rarely do and 24.07% never set an appointment. This may be attributed to the Batho Pele Principle of Courtesy, which insists that government employees should show a high level of courtesy when fulfilling their duties towards the public. The consultation with applicable departments and stakeholders was relatively similar as 20.37% of the EHPs indicated that they always do.

However, when reverting back to **Table 10** there is a contrast on the implementation of this consultative step and rate of importance as considered by EHPs, as 37.04% felt it was very important and an excess of 44% felt it was important. So EHPs may consider it a significant step, but do not always execute it. The steps that were said to be implemented often and in other instances always implemented included; the introduction of the EHP to the informal food trader at 74.07%; the explanation of the purpose of the inspection to the informal food trader at 72.22%; the provision of health education 66.67%; the checking of COA at 64.81%; and the provision of feedback to the informal food trader at 53.7%. Other steps have a low implementation frequency, though they are considered important by EHPs in accordance with **Table 10**. The gap may also exist in the tracking of compliance progress as only 46.30% of EHPs said they always record the details of the inspection in a file. This gap will be expanded upon when triangulation with the data collection checklist is done in a later section of this chapter.

As it has already been established that the majority of EHPs do not make use of a SOP, these steps may be used in the development of a user friendly and directly implementable SOP for the inspection of informal food traders.

Table 13: Rate of Implementation of inspection steps (N=54)

FREQUENCY OF IMPLEMENTATION OF STEPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
Setting an appointment with the informal food trader	13 24.07%	7 12.96%	13 24.07%	7 12.96%	8 14.81%	6 11.11%
Consulting with relevant departments regarding the informal food trader	1 1.85%	1 1.85%	18 33.33%	13 24.07%	10 18.52%	11 20.37%
Consulting with relevant stakeholders regarding the informal food trader	2 3.70%	4 7.41%	15 27.78%	10 18.52%	12 22.22%	11 20.37%
Introducing yourself to the informal food trader	0 0%	2 3.70%	2 3.70%	40 74.07%	1 1.85%	9 16.67%
Explaining the purpose of the inspection to the informal food trader	0 0%	0 0%	2 3.70%	4 7.41%	39 72.22%	9 16.67%

FREQUENCY OF IMPLEMENTATION OF STEPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
Presentation of appointment card	1 1.85%	5 9.26%	15 27.78%	23 42.59%	1 1.85%	9 16.67%
Checking whether the informal food trader is in possession of certificate of acceptability	3 5.56%	1 1.85%	8 14.81%	35 64.81%	1 1.85%	6 11.11%
Using an inspection checklist to check compliance	5 9.26%	6 11.11%	6 11.11%	5 9.26%	23 42.59%	9 16.67%
Giving health education	0 0%	0 0%	1 1.85%	9 16.67%	36 66.67%	8 14.81%
Measuring the temperature of the ready-to-eat food	4 7.41%	4 7.41%	12 22.22%	11 20.37%	14 25.93%	9 16.67%
Recording the temperature of the ready-to-eat food	7 12.96%	3 5.56%	14 25.93%	11 20.37%	11 20.37%	8 14.81%

FREQUENCY OF IMPLEMENTATION OF STEPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
Collecting food samples	4 7.41%	4 7.41%	23 42.59%	8 14.81%	6 11.11%	9 16.67%
Providing feedback of the outcome of the inspection to the informal food trader	0 0%	1 1.85%	4 7.41%	10 18.52%	29 53.70%	10 18.52%
Providing a follow-up date of inspection to the informal food trader	10 18.52%	5 9.26%	12 22.22%	7 12.96%	12 22.22%	8 14.81%
Instituting legal action when compliance is not met	1 1.85%	9 16.67%	11 20.37%	9 16.67%	15 27.78%	9 16.67%
Recording the details of the inspection in a file	2 3.70%	4 7.41%	3 5.56%	11 20.37%	25 46.30%	9 16.67%

4.4.5 Use of Inspection Resources

According to Forkuor, Akuoko & Yeboah (2017:2), regulators of informal food trading work within a weak organisational context of poor logistical resources and this affects effectiveness as well as their motivation. The researcher therefore listed the work tools that may be necessary for the fulfilment of effective inspection of informal food traders and EHPs were requested to indicate how often they make use of these tools either during preparation or actual inspection of informal food traders. Surprisingly, all work tools had a level of use attached to them, meaning that EHPs within the City of EMM are work-tool resource equipped.

Table 14 indicates that 53.70% of EHPs always use their appointment cards while 20.37% often do. This may assist with authentication of the EHP when introducing themselves to the informal food traders. According to Steyn, Labadarios & Nel (2011:2) informal food traders are poorly informed of who regulators are and what they are legally allowed to do. So more consistent use of these appointment cards may assist in this regard. Informal food trader files were indicated to be always used by EHPs at 31.48% and often used at 11.11%. This is inconsistent with **Table 13** above, whereby a higher proportion of EHPs indicated that they always record their inspection findings in an informal food trader file. The work tool that is indicated to be used the most is the inspection checklist at 46.30%, second only to the appointment card, followed by the evaluation form at 35.19%.

This may indicate that EHPs use a tool that guides the content of their inspections so that there is a level of consistency. For temperature control monitoring, 27.78% indicated that they always make use of their thermometer during informal food trader inspections, with 16.67% often using it, 24.07% sometimes making use of it, 5.56% rarely making use of it and 11.11% never using their thermometer. This is fairly consistent with **Table 13** where EHPs indicated the frequency with which they measure the temperature of ready-to-eat food, with minor deviations.

However, through cross-tabulation against **Table 10** the researcher identified no relation between the importance of measuring the temperature with the rate of implementation nor the frequency of use of thermometers for this purpose. For punitive law enforcement tools, 12.96% of the EHPs indicated that they always make use of a spot notice book and 22.22% indicated that they often make use of it, with 12.96% indicating that they never make use of it. This book is also known as a compliance notice book. A fine book was indicated to be always used by 9.26%, often used by 7.41% and sometimes used by 20.37% of EHPs. Although the fine book, fine schedule and court date schedule are used congruently, there are slight deviations in the frequency of use of these work tools. This may indicate that EHPs are very familiar with the contents of the fine schedule, as well as the court date schedule, and therefore need not refer to them during the issuing of fines to non-compliant informal food traders.

The above frequency statistics for the use of these compliance tools may indicate that the level of compliance to the various Environmental Health legislative requirements may be low amongst informal food traders, therefore necessitating the practising of these punitive actions by EHPs. The use of the camera was also relatively high, with 25.93% of EHPs always using it, 18.52% often making use of it and 24.07% sometimes using it. This may be for evidence purposes or future health education and training purposes. A GPS is never used by 42.59% of EHPs and 31.48% of EHPs never make use of a map, which may indicate a clear knowledge of their areas of jurisdiction and hence the high percentage (94.44%) of EHPs being able to identify new informal food trader entrants through area drive-through inspections according to **figure 3**.

Table 14: Use of inspection work tools (N=54)

FREQUENCY OF USE OF WORK TOOLS BY EHPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
Appointment Card	1 1.85%	4 7.41%	6 11.11%	11 20.37%	29 53.70%	3 5.56%
Business Card	19 35.19%	6 11.11%	9 16.67%	4 7.41%	3 5.56%	13 24.07%
Informal food trader file	8 14.81%	5 9.26%	10 18.52%	6 11.11%	17 31.48%	8 14.81%
Inspection Checklist	9 16.67%	2 3.70%	7 12.96%	6 11.11%	25 46.30%	5 9.26%
COA Application form	9 16.67%	4 7.41%	10 18.52%	9 16.67%	13 24.07%	8 14.81%

FREQUENCY OF USE OF WORK TOOLS BY EHPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
Evaluation form	12 22.22%	4 7.41%	3 5.56%	7 12.96%	19 35.19%	9 16.67%
Health Promotion material	9 16.67%	10 18.52%	9 16.67%	8 14.81%	10 18.52%	8 14.81%
Thermometer	6 11.11%	3 5.56%	13 24.07%	9 16.67%	15 27.78%	8 14.81%
Sampling Apparel	7 12.96%	11 20.37%	22 40.74%	2 3.70%	0 0%	12 22.22%
Spot Notice Book	7 12.96%	9 16.67%	8 14.81%	12 22.22%	7 12.96%	11 20.37%
Fine Book	4 7.41%	16 29.63%	11 20.37%	4 7.41%	5 9.26%	13 24.07%

FREQUENCY OF USE OF WORK TOOLS BY EHPS FOR THE INSPECTION OF INFORMAL FOOD TRADERS	RESPONSES					
	Never [n%]	Rarely [n%]	Sometimes [n%]	Often [n%]	Always [n%]	Missing [n%]
Fine Schedule	8 14.81%	15 27.78%	9 16.67%	5 9.26%	3 5.56%	14 25.93%
Court Date Schedule	10 18.52%	12 22.22%	10 18.52%	4 7.41%	3 5.56%	15 27.78%
Camera	4 7.41%	4 7.41%	13 24.07%	10 18.52%	14 25.93%	9 16.67%
GPS	23 42.59%	6 11.11%	6 11.11%	2 3.70%	1 1.85%	16 29.63%
Map	17 31.48%	9 16.67%	5 9.26%	2 3.70%	6 11.11%	15 27.78%

4.4.6 Regulatory Action by EHPs

There are a number of methods that are used in order to get a food premises to comply. According to the compliance process model followed by EHPs in CoJ for enforcement of food safety regulations as shared by Mokoatle (2016), these methods range from health education to prosecution fine. In addition, the EHPs inspecting informal food traders also issue prohibition notices. **Figure 12** shows the action that is taken by EHPs when compliance is not met during the first inspection, leading up to the third inspection. During the first inspection, 92.59% of EHPs indicated that they give health education when there is non-compliance. This percentage is reduced during the second and third inspections to 51.85% and 27.78% respectively.

When comparing the results contained in **Table 10** and **Table 13** there is a direct relationship between the importance rating and implementation rate as it relates to health education by EHPs to informal food traders. The decrease in the percentage for subsequent non-compliance may be attributed to the increase in the issuance of on-the-spot notices, which is a more stringent method of facilitating compliance. The same can be said for the reduction in two other methods, which include the giving of verbal warnings which reflects a reduction from 83.33% to 44.44% and ultimately to 18.52%; and the referral to other departments that assist in the management of informal food traders from 40,74% to 35,19% and finally to 28,3% following the third non-compliance status.

During the first inspection 24.07% of EHPs issue on-the-spot notices, but it increases to 51.85% during the second inspection and reduces to 9.43%. This reduction may be attributed to again a more stringent method of encouraging compliance, which is a prohibition notice. According to R638, which repealed R962, this prohibition notice can be withdrawn as soon as compliance is met and the EHP is satisfied with the conditions in which the informal food trader operates. As can be seen in **figure 12**, during the first non-compliant conditions found, 9.26% of the EHPs prohibit further trading by informal food traders.

R638 makes provision for this should the conditions pose serious health hazards for the public. Upon the second inspection this increases to 14.81% and then to 31.48% during the third inspection where non-compliance is found. Interestingly, training of non-compliant EHPs is greatest during the first inspection at 57.41% and implemented less during the second and third inspections at 18.52% and 9.43% respectively.

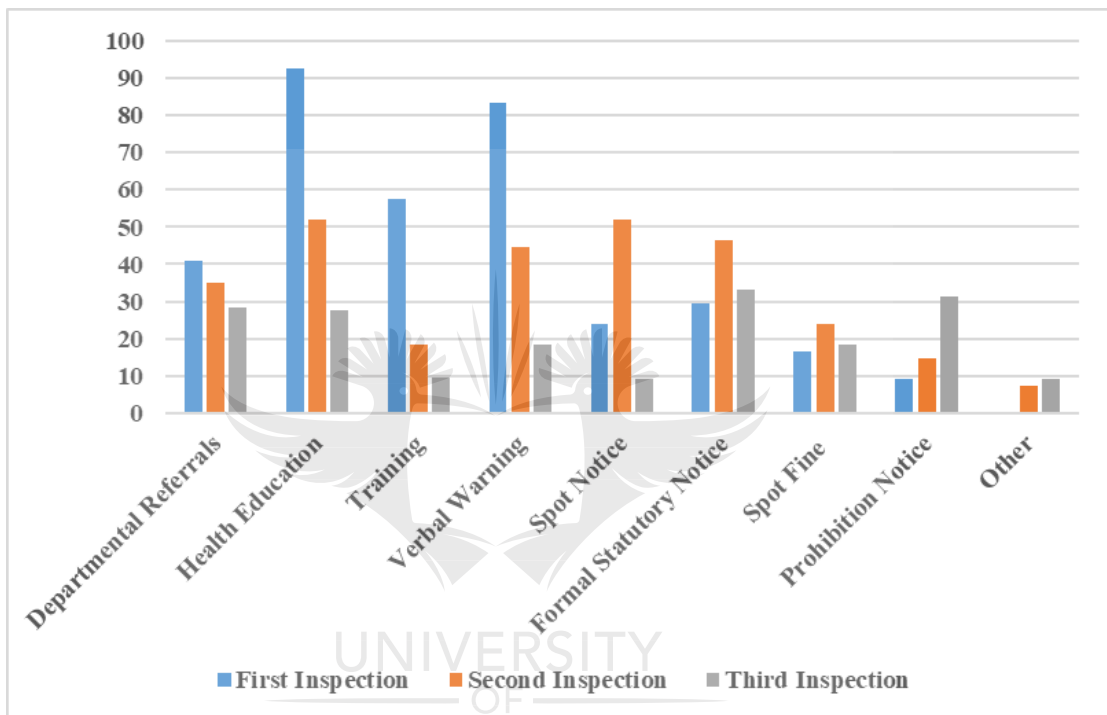


Figure 12: Action Taken by EHPs Following Non-Compliance by Informal Food Traders (N=54)

In order to determine how often follow-up inspections are conducted when non-conformances are found during inspections of informal food traders, EHPs were requested to indicate the frequency from four options. EHPs that conduct follow-up inspections within fourteen days account for 53.70%, 20.37% do so after thirty days, 16.67% indicated that they conduct follow-up inspections after twenty-one days and only 2% after a period longer than thirty days. This frequency deviates from the frequency of routine inspections as shown in **Table 12**.

This may mean that EHPs may prioritise non-compliant informal food traders and demonstrate a greater sense of urgency to ensuring compliance. However, the question that may arise is whether EHPs give informal food traders sufficient time to comply prior to the lapse of time allocated for remedying the non-compliance. Of more significance is the cross tabulation with **Table 10** where 35.19% of EHPs indicated that it is very important to provide a follow-up date to informal food traders, however, as shown on **Table 13** only 22.22% said they always provide such follow-up date.

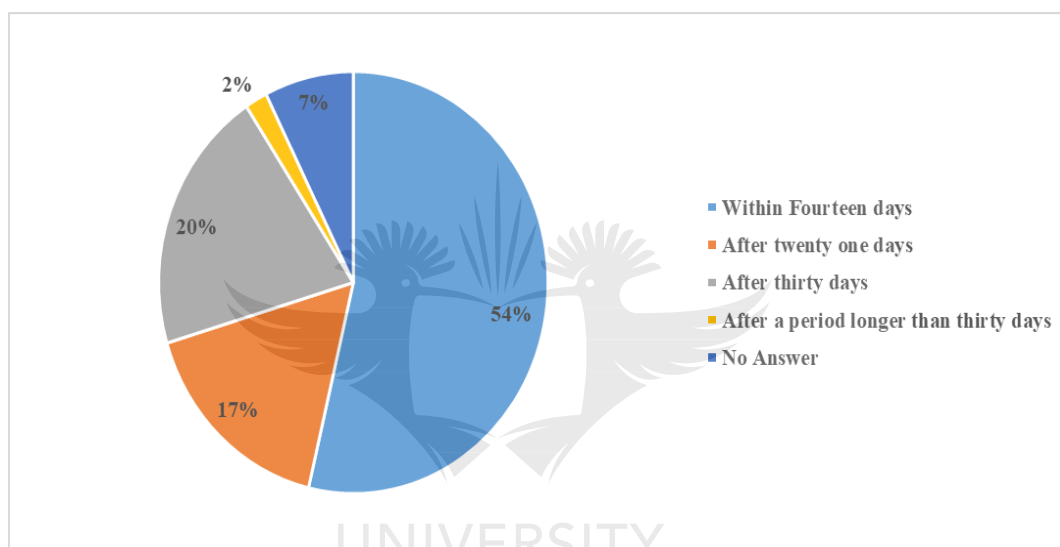


Figure 13: Frequency of Follow-Up Inspection Following Non-Compliance by Informal Food Traders (N=54)

4.4.7 Training of Informal Food Traders

In relation to the training of informal food traders by EHPs, 20.37% said training is provided every 12 months and the same percentage of EHPs said it is provided after a period longer than 12 months (refer to **figure 14**). In order to cross check this data, a comparison was done on when training was conducted for informal food traders within their areas of jurisdiction, with 24.07% indicating that the last training was conducted over a year ago as at time of completing the questionnaire.

The proportion of EHPs that said that they train informal food traders every quarter as well as every 6 months was similar at 16.67%, whilst a similar 22.22% said that the last training done was in the past three and six months. A concern is that 12.96% said that they do not conduct any training at all. According to Cortese, Veiros, Feldman & Cavallia (2016:179) continuous training of informal food traders is necessary in order to help address food quality and safety issues. However, of greater concern was the belief by 74.09% of EHPs that indicated that they consider themselves to not be sufficiently trained to inspect informal food traders (revert to figure 9).

This may raise the question; of what quality is the training provided to informal food traders?

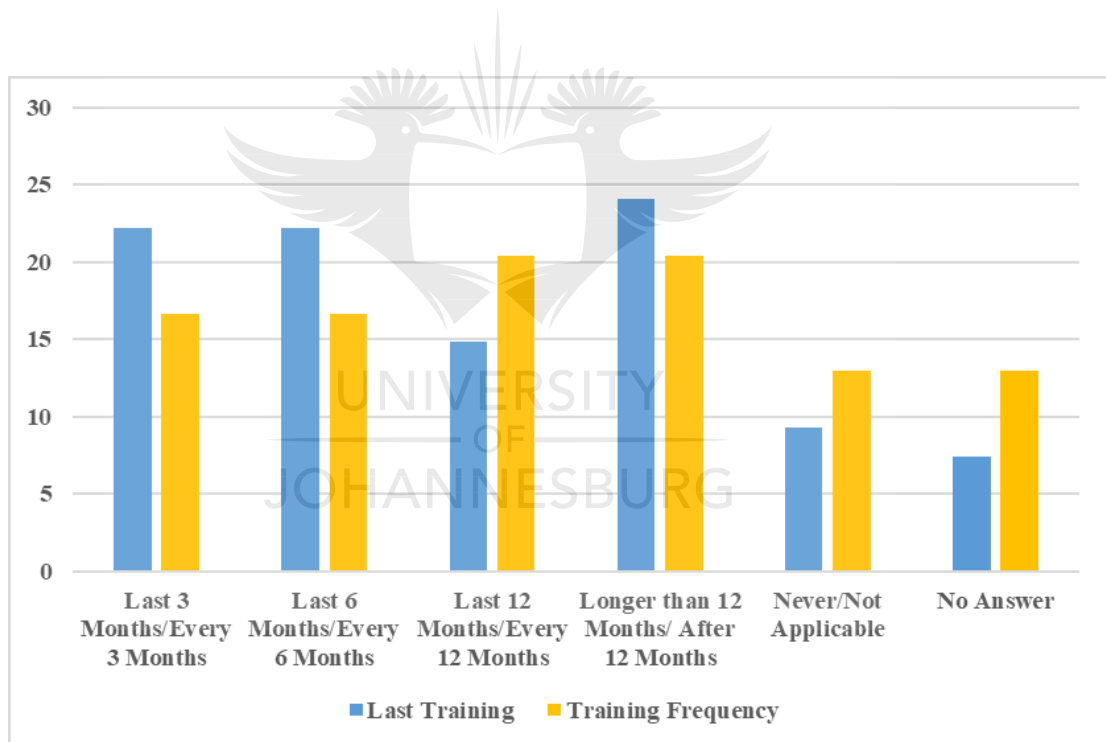


Figure 14: Comparison between Period from Last Training and Frequency of Training (N=54)

4.4.8 Informal Food Trader Record Management

Contained within the self-reported questionnaire was a section in which the EHPs were requested to indicate the documents that they keep in the informal food trader files. An illustration of the results can be seen in **figure 15**. Compliance notices were said to be kept in file the most at 72.22%. This highlights that the level of compliance by informal food traders may be low. However, there exists some inconsistencies. According to findings contained in **Table 14** only 12.96% of EHPs indicated that they make use of spot notice books during inspections, with 22.22% indicating that they often make use of same.

Furthermore, even though there is no specification as to the type of notices to be found in file, it is unlikely that referral is made to the formal statutory notice as there was a lower proportion of issuance indicated for formal statutory notices than there was for on-the-spot notices (see **figure 12**). COA applications were said to be kept in file at 62.96%, closely followed by actual COAs at 59.26%. Should there be a direct correlation between the COA applications and actual COAs kept in file, this indicates that only 3.7% of the informal food trader applicants are unsuccessful in being permitted to trade due to non-compliance.

However, this would contrast the percentage of compliance notices issued and kept in file, which indicates higher levels of non-compliance. Training certificates accounted for 53.70% of documents said to be kept in file. Only 51.85% said they kept inspection reports in file. This is a concern, as EHPs are required to monitor informal food trader compliance and track the information for future inspections. Other documents included evaluation checklists at 50%, evaluation forms at 42.59%, copies of prosecution fines issued at 40.74%, cover page details at 35.19% and proof of referrals to other departments at 33.33%.

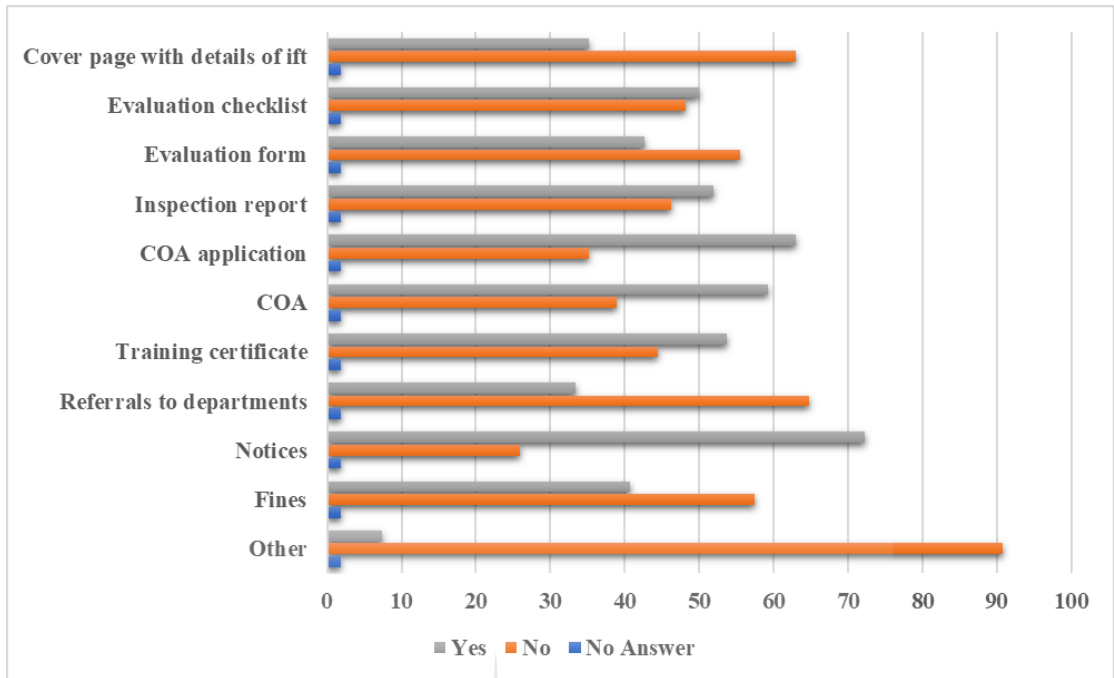


Figure 15: Document Records Said to be Kept in Informal Food Trader Files by EHPs (N=54)

4.5 RECORDS MANAGEMENT RELATED TO INFORMAL FOOD TRADER INSPECTIONS

For the researcher to easily triangulate additional data from that collected from the self-reported questionnaire, document review using a data collection checklist was done.

4.5.1 Records Review Area Description

Table 15 below shows that the highest review took place in the northern region at 50%. This is as a result of this region having the highest population of informal food traders and also having files in place for informal food trader documents. However, NSDA 1, whilst in the northern region, does not have files in place. An equal percentage of files was reviewed from the southern and eastern regions at 25% each.

There were 4 sub-regional offices in which informal food trader files are not kept, 1 in the northern region, 1 in the southern region and 2 in the eastern region, therefore no records review could take place in these offices. This highlights a key inconsistency in the EHP record management practices for inspecting informal food traders within the City of EMM.

Table 15: Area Breakdown of Informal Food Trader Records Review (N=80)

Area	Frequency (n)	Percentage (%)
<i>Region</i>		
North	40	50.00
South	20	25.00
East	20	25.00
<i>Office</i>		
North 1 Tembisa	0	0
North 2 Kempton Park	15	18.75
North 3 Edenvale	17	21.25
North 3 Benoni 1	8	10
South 2 Swartkoppies	0	0
South 3 Boksburg	14	17.5
South 3 Vosloorus	6	7.5
East 1 Benoni 2	6	7.5
East 1 Brakpan	6	7.5
East 2 Springs	8	10
East 3 Nigel	0	0
East 3 Tsakane	0	0

4.5.2 Extensiveness of Data Recorded

The results in **Table 16** show that 58.75% of the reviewed files were found to be complete with an inspection date; whilst on the file cover 26.25% had the informal food traders name and surname, 37.50% showed the informal food traders identity number and only 1.25% showed the trading address. Only 45% of the reviewed files were checked, dated and signed by the Senior EHP. However, not more than 6.50% of these were recorded with comments from the Senior EHP either to note the errors in the record or to advise for appropriate action.

Table 16: Completeness of Recorded Data from Reviewed Informal Food Trader Files (N=80)

Completeness of the files	Yes [n%]	No [n%]	Total [n%]
All dates of inspections indicated	47 58.75%	33 41.25%	80 100%
Name and Surname of informal food trader indicated on file cover	21 26.25%	59 73.75%	80 100%
Identity Number of informal food trader indicated on file cover	30 37.5%	50 62.5%	80 100%
Address of informal food trader indicated on file cover	1 1.25%	79 98.75%	80 100%
Contact Number of informal food trader indicated on file cover	0 0%	0 0%	0 0%
File reviewed by the immediate supervisor or senior environmental health practitioner	36 45%	44 55%	80 100%
Date entered by the immediate SEHP	36 45%	44 55%	80 100%
Signature entered by the immediate SEHP	36 45%	44 55%	80 100%
Comments entered by the immediate SEHP	5 6.25%	75 93.75%	80 100%

From the files reviewed, figure 16 displays that 35% gave no indication of the type of structure used by informal food traders, whilst the usage of mobile trailers was dominant at 26.25%, followed by stalls at 21,25%, caravans at 10% and immobile containers at 2.50%. When compared to figure 4, the recorded structures are similar in type by those indicated by EHPs in the self-reported questionnaire, but differ in presence or quantified dominance.

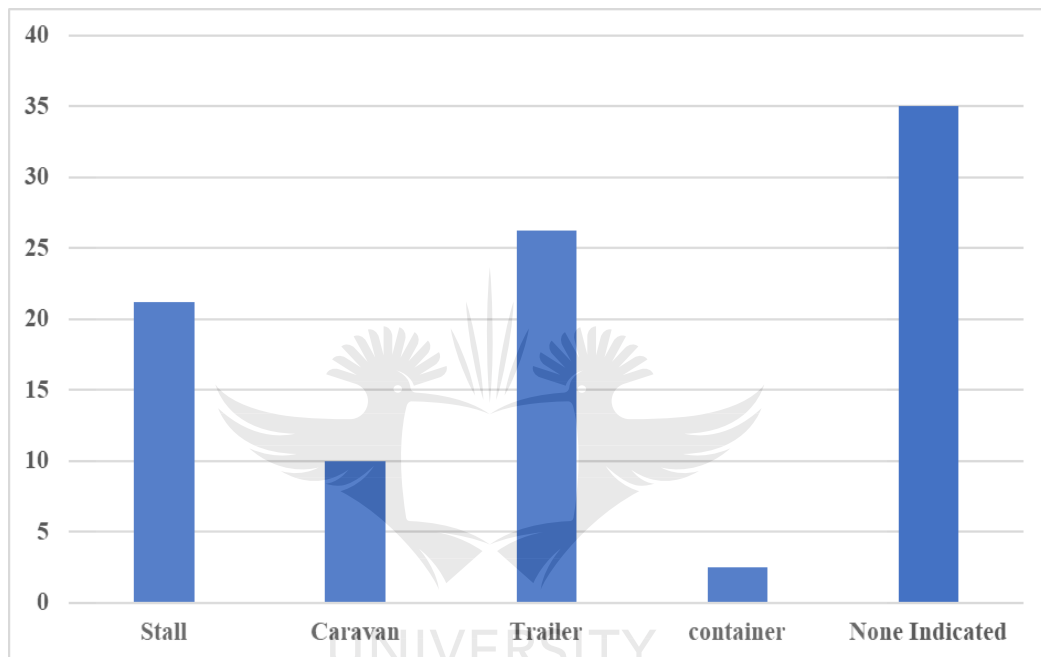


Figure 16: Structures Used by Informal Food Traders According to Documents Reviewed (N=80)

The above indicates that the City of EMM Environmental Health Division does have a recording system in place, although in practice it needs to be improved and enhanced to ensure effective record keeping, evidence management and uniform practices by EHPs inspecting informal food traders.

4.5.3 Evidence of Inspection Frequency

Of the 58.75% of the inspections of informal food traders captured in the files, the frequency of those inspections recorded was falling short of what is prescribed by

the National Norms and Standards for Premises and Monitoring Standards for EHPs at 40%, similarly, this was the case for the EMM service standards at 40%. **Figure 17** gives a representation of this.

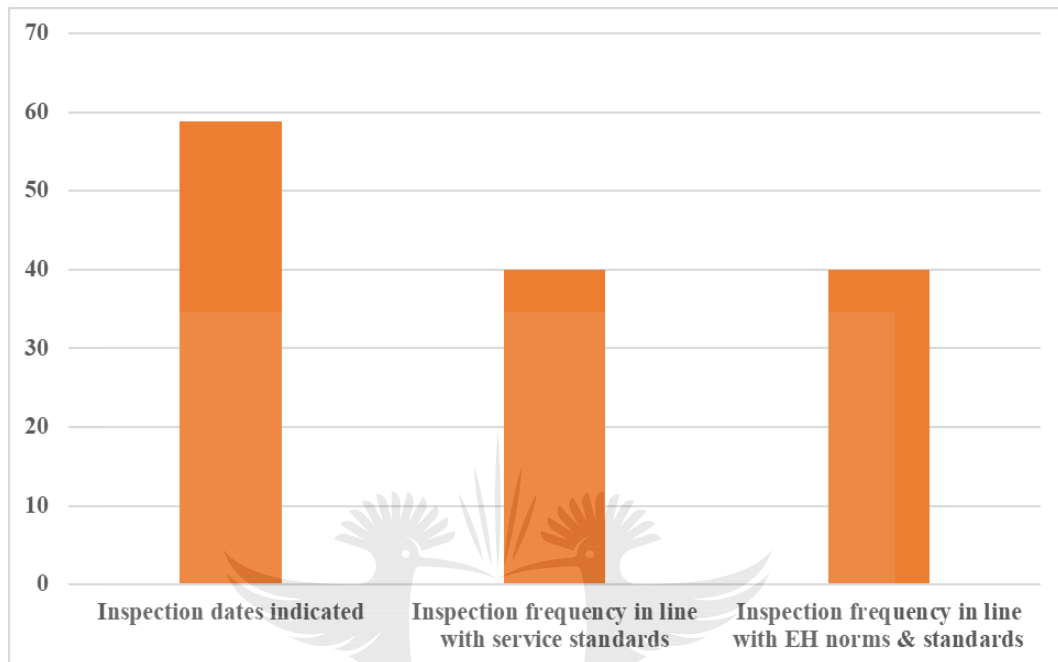


Figure 17: Inspection Frequencies Against Service Standards and Norms and Standards (N=80)

4.5.4 Indication of Regulatory Action

As mentioned earlier, there are a number of methods that are used in order to get an informal food trader to comply. **Figure 18** shows the recorded action that is taken by EHPs when the informal food trader does not meet compliance. In contrast to the 92.59% given by the EHPs for health education when they completed the questionnaire, in the files only 12.50% of EHPs indicated that they give health education when there is non-compliance.

Only two other law enforcement actions were found within the files, namely formal statutory notices at 3.75% and spot notices at 1.75%. Given the divergence with figure 12, this indicates that even though the EHPs may take various types of actions

directed at non-compliant informal food traders, records of such are poorly indicated, kept and managed.

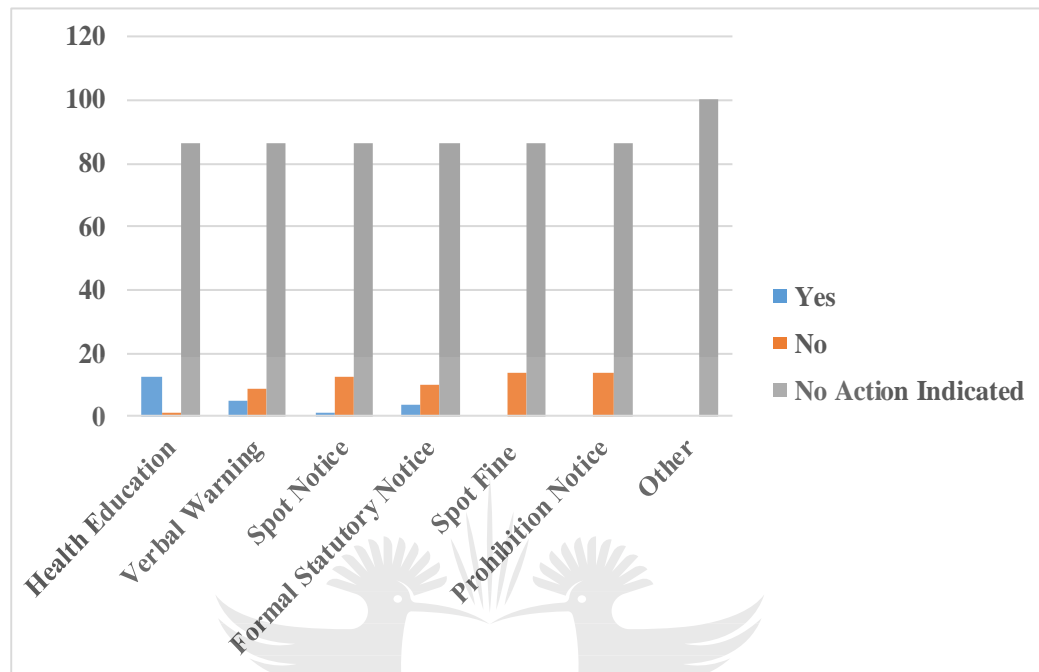


Figure 18: Records of Action Taken by EHPs Following Non-Compliance by Informal Food Traders (N=80)

4.5.5 Referral Documents, Forms and Reports Kept in Files

The document most commonly found in the files was a COA application form at 71.25%, followed by a COA at 67.5%, COA evaluation form at 65%, inspection report at 56.25% and the minority was the proof of referral to the Economic Development Department and approval from this department at 7.5% and 5% respectively. When compared with figure 15, the COA application is still dominant, but notices are the majority documents as shared by EHPs in the self-reported questionnaire.

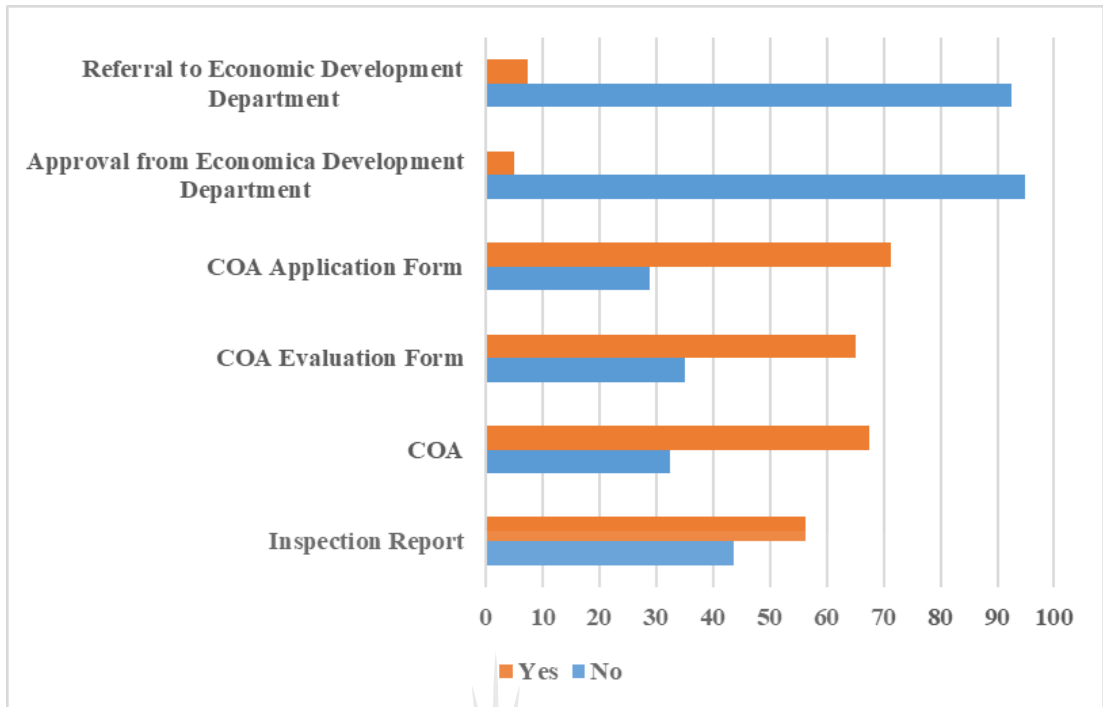


Figure 19: Documents Kept in Informal Food Trader Files (N=80)

4.5.6 Timeframe for issuance of COA

Although R638 simply states that a COA should be issued without delay after compliance is met, the City of EMM service standards specify that an application form must be issued within 48 hours of an enquiry. It further states that the inspection must be conducted within five working days and upon compliance, the COA must be issued to the food premises owner or manager within fifteen working days. Out of the COAs issued to informal food traders, a mere 40% was issued within the required timeframe, with 60% failing to do so. One of the reasons for this disparity may be the lack of human resource capacity and placement due to non-adherence to the WHO ratio for EHP personnel per 10000-community population.

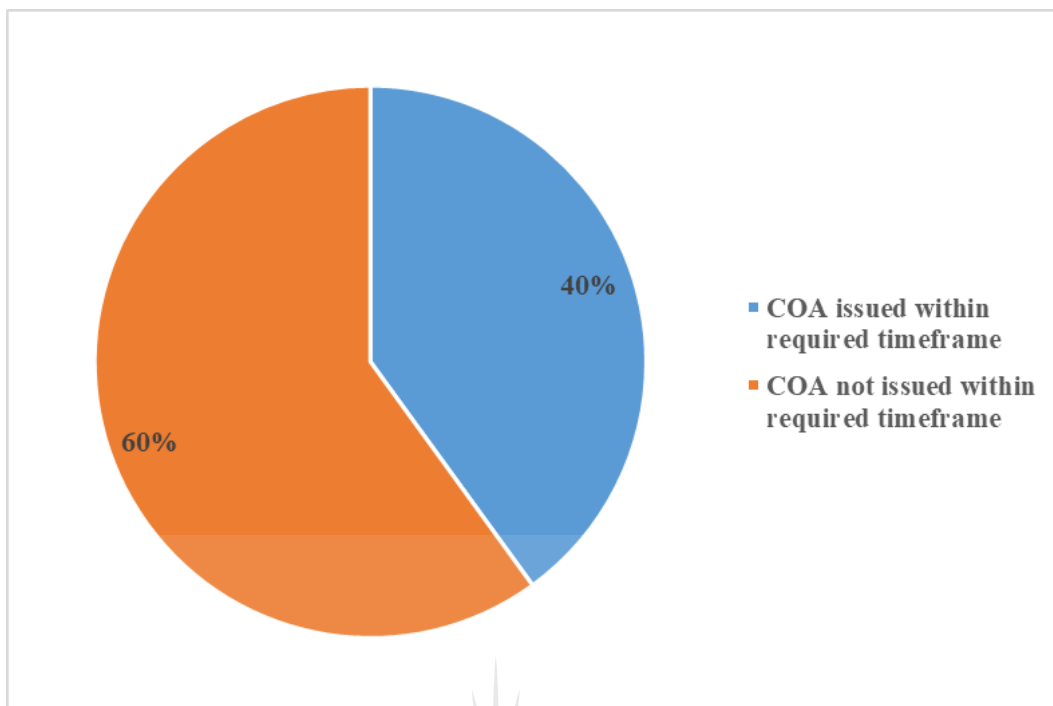


Figure 20: COA Issued Within Required Timeframe Following Compliance by Informal Food Trader (N=80)

4.6 DATA ANALYSIS AND INTERPRETATIVE LIMITATIONS

This research had the following recorded data analysis limitations:

- Due to the disproportion in the responses from the EHPs at sub-regional level, it was difficult to stratify and compare the practices of EHPs against each sub-region. The comparison could only be done as far as regional level.
- There were sub-regions where no document review could take place as a result of no informal food trader files being in place. This reduced the envisaged number of records reviewed.

4.7 SUMMARY

The above, reported findings reveal that there is a level of inconsistency with which EHPs inspect, enforce, certify and relate with informal food traders within their juristic regions and areas. In effect, the study was able to evaluate the processes followed by EHPs when inspecting informal food traders; determine their knowledge of informal food trading legislation and give a description as well as comparison of the EHPs practices at regional level. This was done through the use of a self-reported questionnaire and data collection checklist.

A significant finding was the extent to which EHPs considered themselves to not be sufficiently trained to inspect informal food traders, coupled with the gap that there is a lack of a SOP that EHPs can use for the inspection of informal food traders. Also, of importance was how EHPs rated certain practices as very important, however did not implement them.

Through the review of informal food trading records, the study found that there is a recording system in place, although with shortcomings that need to be attended to, duly accountable to EHPs who complete and update the files and SEHPs who authenticate and audit the files to ensure uniformity in service delivery and advise further action where applicable.

5. CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

In this chapter, a conclusive summary is given of the overall research study, deviations from the original protocol are noted and finally recommendations are shared, based on the findings of this study.

5.2 CONCLUSION

The presence of informal food traders can be seen as all-pervasive and they can be seen in pronounced places in most cities (Charman, 2016:2), including the City of EMM. The role of EHPs inspecting them has been highlighted and they have a mandate to ensure that the food sold and served to consumers is safe. The aim of this study was to assess the practices of EHPs inspecting informal food traders. Since there are some parallels between knowledge and practices (Pallamparthy & Basavareddy, 2019:75), some aspects of knowledge were also assessed. The EHPs showed an awareness and familiarity of their areas and knowledge of ways in which they are able to identify new informal food trader entrants operating within their areas of jurisdiction.

Notably, even though informal food traders are regarded as potential conduits of foodborne disease and a public health concern (Alimi, 2016:242), 20% of EHPs are neutral on their consideration of the extent to which they are a public health concern, with 6% considering them a minor concern. This study has revealed that even though legislation is available, it is more of an umbrella approach that places informal food traders in the same level of scrutiny as formal businesses.

Furthermore, there is no specific legislation that EHPs can refer to; and understand pertaining specifically to informal food trading. EHPs have demonstrated an awareness that multiple legislative documents are available, however they have also shown that the degree to which they regard these pieces of legislation to be

important differs greatly. They have also shown that whilst some legislation may be important, the referral to and implementation of it is not uniform. The major revelation that this study brings forth is the lack of formal or approved SOP that is aimed specifically at the inspection and monitoring of informal food traders. Although 74.07% of EHPs have a 4-year B-Tech Degree and 37.04% may be trained to inspect informal food traders, there will always be likely inconsistencies in their practices so long as this remains the case.

Furthermore, the quality of their training may be questionable considering the EHPs' perspective that they have not been sufficiently trained in this regard. Couple this with there being no outlined steps pertaining to the process of preparing for, inspecting and recording an inspection of an informal food trader, the gap in the inconsistency is likely to widen rather than narrow down. The study has also revealed that the City of EMM can be commended for making the necessary work resources and tools available to the EHPs for use during the inspection of informal food traders. However, the frequency of use of such tools differs amongst EHPs. This can also be largely attributed to there being no formal and approved SOP that is aimed specifically at the inspection and monitoring of informal food traders.

Other inconsistencies revealed included the frequency with which informal food traders are inspected; the frequency with which follow-up inspections are made, the action taken when non-conformances are found and the recording of inspection findings. It has been shown that although informal food trader files are kept by EHPs within the City of EMM, not all regions follow this practice. Moreover, there are documents that are kept by some EHPs and not others. Some of these documents include inspection reports, COA completed application forms and copies of issued COAs.

This creates a gap in which the effectiveness of inspecting informal food traders is not easily audited for statistical purposes, knowing the status quo of compliance and implementing corrective measures. Furthermore, when EHPs exit the employ of the City of EMM, the lack of systematic record keeping may lead to ineffective

succession and handover for new EHP entrants within that specific area of jurisdiction. Therefore, a new system to improve the uniformity for keeping records in file is necessary.

5.3 DEVIATIONS

The original proposal did not mention that the Senior EHPs would be interviewed for purposes of getting the number of informal food traders per sub-regional office and determine the number of files to be reviewed, as well as getting summative data about the sub-region. However, any notes and opinions given by the Senior EHP during this time was not included as a finding within this study (refer to **Appendix J**).

5.4 RECOMMENDATIONS

Section 24 of the Constitution of the Republic of South Africa (1996) places upon municipalities the responsibility to ensure a safe and healthy environment. In addition, the RSA National Development Plan 2030 places emphasis on government having a primary directing and guidance role in initiating and developing strategies and making certain these are implemented and monitored to ascertain their impact in the long term (NDP, 2013).

The two aforementioned documents will, in principle, guide the following recommendations below.

5.4.1 Knowledge Management

Knowledge management is a strategic approach which involves the making of knowledge within an organisation widely and easily accessible so as to ensure that information gets to the right person at the right time, enabling them to make an informed decision (Vuori, Helander & Mäenpää, 2019:255). The aim is to increase

efficiency and improve an organisation's overall performance (Eslamkhah & Seno, 2019:278). It is recommended that three approaches be used, namely:

- Development of an SOP;
- Training of EHPs; and
- Data Management System Implementation.

Standard Operating Procedure

To increase and improve the uniformity with which EHPs inspect informal food traders, it is recommended that a SOP be developed that will deal with every aspect involved. The process followed for the development of this SOP must be a bottom-up approach that takes cognisance of the EHPs' inputs and considerations at operational level. This will enable the EHPs to express their challenges and ensure that attention is brought for a solution-driven approach (Chaudhary, Birbaumer & Ramos-Murguialday, 2016:138). Furthermore, the EHPs are likely to be more encouraged to implement something that they are a part of developing rather than a strategy that is imposed upon them.

The aspects that the SOP must cover should include basic knowledge such as the definition of an informal food trader and the different types of structures that are used. It should also include important documents that EHPs should be acquainted with and use when inspecting an informal food trader. In addition, the SOP should include preparatory steps such as ensuring that all necessary resources and equipment are in place for the inspection.

It should also have a step-by-step instruction manual that includes:

- The steps to be followed from the point at which an EHP is aware of a new informal formal food trader in their area of jurisdiction;
- The facilitation of applications such as licenses and COAs, with applicable timeframes;
- The actual inspection, including courtesy and approach;
- Key law enforcement options applicable to degrees of compliance or non-compliance;
- Records keeping and management; and
- Follow-up inspections.

Other important aspects of the SOP should include key points on pre-requisite training prior to implementation by new EHPs within the City of Ekurhuleni, as well as compliance to legislative requirements such as the frequency to be followed for the inspection of informal food traders. The SOP should then be revised as applicable legislation is amended. There should be a stipulated and agreed timeframe allotted to the workshopping of the SOP to EHPs, with further stipulation of the frequency with which the SOPs will be workshopped to EHPs.

Training of EHPs

Training is another important form of knowledge management that will aid in maintaining consistency in the inspection of informal food traders. Training can take various forms, so it is important to select the most effective method of training (Beidas, Koerner, Weingardt & Kendall, 2012:224). There should be a determination of the manner in which training will be facilitated to EHPs within the City of EMM. An example can be the manner in which the Peace Officer training is done within the City of EMM, where EHPs attend a training workshop that involves theoretical data, group activities, home-based assignments and an assessment at the end. A certificate of completion is then issued to the EHP upon successful completion of the training.

The training of EHPs should include key aspects such as:

- What an informal food trader is and the role of the EHP in relation to informal food trading;
- Refresher sessions on key legislation used in the inspection of informal food traders; and
- A thorough look at the developed SOP as per the recommendation above.

The relationship between knowledge and practices is based on the notion that increasing personal knowledge (both declarative knowledge which is a knowledge of issues and procedural knowledge, which is knowledge of action strategies) will influence behaviour patterns and behaviour change (Siltrakool, 2017:36). Knowledge accumulates through learning processes which take the form of formal or informal instruction, personal experience, repeated applications and experiential sharing (Fertman & Allansworth, 2010:84). That is the reason for training and education of informal food traders being emphasised in studies by Muyanja *et al.* (2011:1557) and Letuka, Nkhebenyane & Thekiso (2019:3).

Furthermore, the Health Professions Council of South Africa (HPCSA), R2309 of 1976 Regulations relating to the registration by Environmental Health Officers of additional qualifications (as amended) imposes a compulsory responsibility for continuous professional development upon professionals within the health sector of South Africa. i.e. EHPs. This need for continuous training of EHPs is necessary as environmental health issues such as informal food trading will become more complex in the future (Donkor, Kayang, Quaye & Akyeh, 2009:2834), which will necessitate a well-educated and well-trained environmental health workforce (Knechtges & Kelley, 2015:24). This will advance informal food trader policy development, funding for necessary inspection and monitoring tools and equipment (Idowu, Adagunodo & Esimai, 2012:65) and define competencies that promote uniform application of legal inspection procedures (Mlay, 2018:46).

Data Management System

To maintain uniformity in records management it is recommended that in addition to an SOP which includes the procedure to be followed by EHPs post inspection, a data management system of an electronic nature be used. We are now in a time termed the 4th industrial revolution and as such the City of EMM should be keeping abreast with changes and adaptations in technology (Xu, Jeanne& Suk, 2018:92). The point of departure can be the emulation of the inspection tool used by the George Municipality within the Western Cape province.

This tool is an electronic device that an EHP uses onsite, captures the findings of the inspection and action taken, and prompts the owner of the food premises to sign as confirmation of the inspection. The data is then centralised and saved on the municipal database for future retrieval and use by approved persons, including EHPs. It minimises the use of paper throughout the process. This tool helps institutionalize knowledge assets and creates a ‘single version of the truth’ portal for knowledge resources. This tool also assists in the identification of gaps and bottlenecks, thereby allowing a limitation in human error.

5.4.2 Document Updates

It is recommended that the National Department of Health, Food Control Directorate be involved in the updating of applicable legislation such as R638 of 22 June 2018, so that it includes sections that speak specifically and directly to the inspection of informal food traders. This will eliminate the umbrella approach in which informal food traders and formal food premises face the same level of scrutiny with the same requirements prescribed for both. Alternatively, new regulations can be developed for this purpose (though this may be more cumbersome). It is also recommended that the City of EMM update its 2008 Street Trading Policy into a newer, more user friendly and facilitative informal food trading policy that takes international guidelines into consideration.

The City can also benchmark against its counterpart metropolitan municipalities within the RSA. This will assist in enhancing interdepartmental and inter-agency collaborations and ensure that departments are aware of their roles as it relates to informal food traders. Special task forces can be used to update the policies that guide informal food trading management.

5.4.3 Institutional Involvement

It is recommended that institutions of higher learning that offer Environmental Health studies (such as universities and universities' of technology) be involved by adding modules and or content on informal food trading to their existing curriculum. This will assist in guiding student EHPs into understanding the complexity of food safety from not only a formal premises stand point, but informal food trading point of view as well, making EHPs better acquainted with the required practices early on and better equipped when entering the municipal working environment.

5.5 FUTURE RESEARCH

It was shown in the literature review that no similar study exists that assesses the practices of EHPs or law enforcers inspecting informal food traders, therefore, this study can serve as a foundation for other studies. Further studies are recommended as follows:

- An investigation of the effectiveness of training methods for the improvement of food safety amongst informal food traders;
- A study to determine the food safety risks of informal food trading in rural areas;
- A study to assess the effectiveness of environmental health supervision and monitoring in ensuring food safety compliance;
- A similar study that will monitor a change or improvement in the EHPs practices who inspect informal food traders; and

- A study to determine the type of street foods eaten and their contribution to the diet of various population groups, especially women and children.

5.6 SUMMARY

Important issues such as hygiene considerations have been shown in the literature regarding informal food trading to be the most important issues at hand, while the business operation and the guiding legislation of this type of trade is often overlooked. The literature readily acknowledges the contribution that the informal food trade has on the economy, but fails to explore how best to monitor this trade in a manner that is uniform and has consistent systematic results. This research study thus embarked on assessing the practices of EHPs who inspect informal food traders.

Numerous gaps were identified, and recommendations made to curtail these gaps. Some advantages of this study will include a smoother inspection and certification process for informal food traders, improved data management system which will eventually assist in making informal food trading more lucrative by increasing the effectiveness of training by EHPs. This will make informal food traders more knowledgeable and aware, but also make their products healthier and safer. The reciprocal impact being an improvement in the overall health of consumers who frequently buy foods prepared by informal food traders.

The recommendations as put forth in this study can be applied in other local and metropolitan municipalities in South Africa where EHPs are appointed and inspect informal food traders with an aim of ensuring compliance and uniformity of practice. These municipalities can use the recommendations of this study to improve their informal food trader inspection processes and data management systems.

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7. APPENDICES

7.1 APPENDIX A: EHPs SELF-REPORTED QUESTIONNAIRE

Date Completed: _____

Please answer the following questions by marking an X in the relevant block in the space provided.

EXAMPLE of how to complete the questionnaire:

What position do you currently occupy?

Senior EHP	
EHP	X

Have you been involved in the inspection of informal food traders?

Yes	
No	

If no, DO NOT ANSWER THE QUESTIONNAIRE.

If yes, kindly provide your HI Number and proceed to complete the questionnaire _____

7.1.1 Section A: Demographic Information

1. What position do you currently occupy?

Senior EHP	
EHP	

2. How many years of experience do you have in the above-mentioned position?

0-5 years	
5 -10 years	
10 -15 years	
15+ years	

3. Highest environmental health qualification obtained.

3-year National Diploma	
4-year B-Tech Degree	
Master's Degree	
PhD/Doctorate	

4. In which area are you based?

North 1	North 2	North 3	South 1	South 2	South 3	East 1	East 2	East 3
1	2	3	4	5	6	7	8	9

5. How long have you been based at the above-mentioned offices?

0-5 years	
5-10 years	
10-15 years	
15+ years	

6. How would you describe your area of jurisdiction? (*Mark all that apply*)

Township	
Suburbs (Residential)	
Town (CBD)	

Informal Settlement	
Industrial	

7.1.2 Section B: Knowledge Regarding Informal Food Trader Inspections

1. When last were you involved in the inspection of an informal food trader?

Within the last 30 days	
Within the last 60 days	
Within the last 90 days	
Within the last 180 days	
Within the last year or less	

2. To what extent is informal food trading a public health concern?

No extent	
Small extent	
Medium extent	
Large extent	
Very large extent	

3. How would you rate your knowledge of an informal food trader inspection?

Poor	
Fair	
Good	
Very good	
Excellent	

4. Informal food trading is defined as: (*Mark all that apply*)

Trading, by all food premises in ready-to-eat foods and beverages	
Trading in fruits and vegetables in streets and public spaces	
Trading, by informal food traders in ready-to-eat foods and beverages	

Trading in ready-to-eat foods and beverages that can be consumed at a later stage without further processing or preparation, sold in streets and public places	
Trading, by informal traders in all types of foodstuffs sold in streets and public spaces	

5. When do you become aware of an informal food trader operating in your area of jurisdiction? (*Mark all that apply*)

Office consultation	
Area drive-through	
Joint operations	
Complaints	
Referrals from other departments and stakeholders	
Other, please specify:	

6. Do you make use of a standard operating procedure for the inspection of informal food traders?

No, there is no standard operating procedure in place	
No, it is not necessary	
No, it is not easy to use	
Yes	

7. Kindly rate the importance of (column 1) and the frequency of referral to (column 2) the following legislative documents for the inspection of an informal food trader:

	COLUMN 1					COLUMN 2				
	Not important at	Not important	Neutral	Important	Very important	Never	Rarely	Sometimes	Often	Always
The Constitution of the Republic of South Africa (Act 108 of 1996)										
The Business Act (Act 71 of 1991)										
The National Health Act (Act 61 of 2003)										
National Norms and Standards for Premises and Acceptable Monitoring Standards for Environmental Health Practitioners (Notice 1229 of 24 December 2015)										
Regulations Defining the Scope of the Profession of Environmental Health (R698 of 26 June 2009)										
The Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972)										
Regulations Governing the General Hygiene Requirements for Food Premises and the Transport of Food (R962 of 23 November 2012)										

	COLUMN 1					COLUMN 2				
	Not important at	Not important	Neutral	Important	Very important	Never	Rarely	Sometimes	Often	Always
Regulations Relating to the Powers and Duties of inspectors and analysts conducting inspections and analyses at Food Premises (R328 of 20 April 2007)										
The Codex Alimentarius – The Recommended International Code of Practice, General Principles for Food Hygiene International, CAC/RCP (3-1997)										
The Ekurhuleni Metropolitan Municipality Public Health Bylaws [COUNCIL RESOLUTION: A-ET (01-2009) 23 September 2009]										
The Criminal Procedure Act (Act 51 of 1977)										
Ekurhuleni Metropolitan Municipality Policy: Informal and Street Trading Policy and Management Framework, ITEM B-ED (07-2008)										

8. Kindly rate the importance of (Column 1) and the frequency with which you implement (Column 2) the following steps for the inspection of an informal food trader:

	COLUMN 1					COLUMN 2				
	Not important at all	Not important	Neutral	Important	Very important	Never	Rarely	Sometimes	Often	Always
Setting an appointment with the informal food trader										
Consulting with relevant departments regarding the informal food trader										
Consulting with relevant stakeholders regarding the informal food trader										
Introducing yourself to the informal food trader										
Explaining the purpose of the inspection to the informal food trader										
Presentation of appointment card										
Checking whether the informal food trader is in possession of certificate of acceptability										
Using an inspection checklist to check compliance										
Giving health education										
Measuring the temperature of the ready-to-eat food										

	COLUMN 1					COLUMN 2				
	Not important at all	Not important	Neutral	Important	Very important	Never	Rarely	Sometimes	Often	Always
Recording the temperature of the ready-to-eat food										
Collecting food samples										
Providing feedback of the outcome of the inspection to the informal food trader										
Providing a follow-up date of inspection to the informal food trader										
Instituting legal action when compliance is not met										
Recording the details of the inspection in a file										

9. What informs the frequency with which you inspect informal food traders?
(Mark all that apply)

Legislation	
Policy	
Service Standards	
Standard Operating Procedure	
Personal work experience and discretion	
Supervisor discretion	
Environmental Health Practitioner Colleagues	
Other, please specify:	

10. Which structures do informal food traders in your area of jurisdiction use?
(Mark all that apply)

Stall	
Caravan	
Tent/Gazebo	
Cart	
Mobile Kitchen/Trailer	
Other, please specify:	

11. Have you undergone any training related to law enforcement directed at informal food trading?

Yes	
No	

12. With the exception of the Environmental Health Division, what departments and stakeholders within Ekurhuleni Metropolitan Municipality inspect informal food traders? (Mark all that apply)

Customer Relations Management Department	
City Planning and Development Department	
Economic Development Department	
Finance Department	
Building Control Department	
Facilities Management and Real Estate Department	
Ekurhuleni Metropolitan Police Department	
Corporate Legal Services Department	
Roads and Storm Water Department	
Water and Sanitation Department	
Enterprise Programme Management Department	
Disaster and Emergency Management Services Department	
Hawkers Associations	
Other, please specify:	

16. Do you consider yourself sufficiently trained to inspect informal food traders?

Yes	
No	

If no, what measures can assist you in this regard?

7.1.3 Section C: Practices of Environmental Health Practitioners Inspecting Informal Food Traders

1. Do you keep records of any of the following documents in file for an informal food trader operating in your area of jurisdiction? (*Mark all that apply*)

No, I do not keep files of informal food traders	
Cover page with details of informal food trader	
Evaluation checklist	
Evaluation form	
Inspection report	
COA application	
COA	
Training certificate	
Referrals to departments	
Notices	
Fines	
Other, please specify:	

2. In preparation for an inspection of an informal food trader, how often do you make use of the below mentioned work tools?

	Never	Rarely	Sometimes	Often	Always
Appointment Card					
Business Card					
Informal food trader file					
Inspection Checklist					
COA Application form					
Evaluation form					
Health Promotion material					
Thermometer					
Sampling Apparel					
Spot Notice Book					
Fine Book					
Fine Schedule					
Court Date Schedule					
Camera					
GPS					
Map					

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3. What is the common frequency with which you routinely inspect informal food traders?

Monthly	
Every two months	
Quarterly	
Every six months	
Once a year or less	

4. When last did you conduct training for informal food traders?

Within the Last three months	
Within the Last six months	
Within the Last twelve months	
Longer than twelve months ago	
Never	

5. How often do you train informal food traders within your area of jurisdiction?

Every three months	
Every six months	
Every twelve months	
After a period longer than twelve months	
Not Applicable	

6. What measures do you apply when informal food traders do not comply with legislative requirements during the first inspection? (*Mark all that apply*)

Departmental Referrals	
Health Education	
Training	
Verbal Warning	
Spot Notice	
Formal Statutory Notice	
Spot Fine	
Prohibition Notice	
Other, please specify:	

7. After how long do you conduct follow-up inspections for non-compliance to informal food trader requirements?

Within Fourteen days	
After twenty-one days	
After thirty days	
After a period longer than thirty days	

8. What measures do you apply when informal food traders do not comply with legislative requirements during the second inspection? (*Mark all that apply*)

Departmental Referrals	
Health Education	
Training	
Verbal Warning	
Spot Notice	
Formal Statutory Notice	
Spot Fine	
Prohibition Notice	
Other, please specify:	

9. What measures do you apply when informal food traders do not comply with legislative requirements during the third and subsequent inspections? (*Mark all that apply*)

Departmental Referrals	
Health Education	
Training	
Verbal Warning	
Spot Notice	
Formal Statutory Notice	
Spot Fine	
Prohibition Notice	
Other, please specify:	

10. How often are informal food trader files submitted to the Senior Environmental Health Practitioner for review?

Never	
Rarely	
Sometimes	
Often	
Always	



7.2 APPENDIX B: INFORMAL FOOD TRADER DATA COLLECTION CHECKLIST

The researcher shall process this data collection checklist during visits at the sub-regions.

DATE COMPLETED					
REGION					
SERVICE DELIVERY AREA OFFICE					
No.	In File		Yes	No	
1.	Full details of informal food trader on file cover	a.	Name and Surname		
		b.	Identification number		
		c.	Address		
		d.	Contact number		
2.	Type of structure indicated (In file or on COA application form)	a.	Stall		
		b.	Caravan		
		c.	Trailer		
		d.	Other - _____		
3.	All dates of inspections indicated				

No.	In File	Yes	No		
4.	Frequency of inspections in line with standards	a.	Ekurhuleni Metropolitan Municipality Service Standards		
		b.	National Environmental Health Norms and Standards and acceptable monitoring standards for Environmental Health Practitioners		
5.	Referral to Economic Development Department				
6.	Approval from Economic Development Department				
7.	COA application form				
8.	COA evaluation form				
9.	COA issued				
10.	COA issued within specified timeframe as per related standard	a.	Ekurhuleni Metropolitan Municipality Service Standards		
		b.	National Environmental Health Norms and Standards and acceptable monitoring standards for Environmental Health Practitioners		
11.	Inspection Report				
12.	Action taken is indicated when found to be non-compliant				

No.	In File		Yes	No	
13.	Type of action indicated	a.	Health Education		
		b.	Verbal Warning		
		c.	Spot Notice		
		d.	Formal Statutory Notice		
		e.	Spot fine		
		f.	Referral to Ekurhuleni Metropolitan Police Department		
		g.	Prohibition Notice		
14.	File reviewed by the immediate supervisor/Senior Environmental Health Practitioner				
15.	Action by the immediate supervisor/Senior Environmental Health Practitioner	a.	Date		
		b.	Signature		
		c.	Comments		
16.	Additional Notes				

Researcher Signature: _____

7.3 APPENDIX C: INFORMATION LETTER TO STUDY PARTICIPANTS

Good Day

My name is LESEGO KGOLANE, **I WOULD LIKE TO INVITE YOU TO PARTICIPATE** in a research study on assessing the practices of Environmental Health Practitioners inspecting informal food traders.

Before you decide on whether to participate, I would like to explain to you why the research is being done and what it will involve for you. **I will go through the information letter with you and answer any questions you have.** This should take about 30 to 40 minutes. The study is part of a research project being completed as a requirement for a master's degree in Environmental Health through the University of Johannesburg.

THE PURPOSE OF THIS STUDY is to assess the practices of Environmental Health Practitioners inspecting informal food traders in Ekurhuleni Metropolitan Municipality.

Below, I have compiled a set of questions and answers that I believe will assist you in understanding the relevant details of participation in this research study. Please read through these. If you have any further questions, I will be happy to answer them for you.

DO I HAVE TO TAKE PART? No, you do not have to. It is up to you to decide to participate in the study. I will describe the study and go through this information sheet. If you agree to take part, I will then ask you to sign a consent form.

WHAT EXACTLY WILL I BE EXPECTED TO DO IF I AGREE TO PARTICIPATE? Complete or mark with a cross where applicable and write eligibly in the case of open-ended questions. You will be expected to answer the questions truthfully and are discouraged from consulting colleagues, the internet or any source of information.

WHAT WILL HAPPEN IF I WANT TO WITHDRAW FROM THE STUDY? If you decide to participate, you are free to withdraw your consent at any time without giving a reason and without any consequences. If you wish to withdraw your consent, please inform me as soon as possible.

IF I CHOOSE TO PARTICIPATE, WILL THERE BE ANY EXPENSES FOR ME, OR PAYMENT DUE TO ME: You will not be paid to partake in the study and you will not bear any expenses.

RISKS INVOLVED IN PARTICIPATION: There are no risks of participating in the study.

BENEFITS INVOLVED IN PARTICIPATION: Baseline on Environmental Health Practitioners' knowledge and practices when conducting inspections of informal food traders in Ekurhuleni Metropolitan Municipality will be generated through the study. Results of the study can be incorporated into future policies.

WILL MY PARTICIPATION IN THIS STUDY BE KEPT CONFIDENTIAL? Yes. Names on the questionnaire/information sheet will be removed once analysis starts. All data and back-ups thereof will be kept in password protected folders and/or locked away as applicable. Only my research supervisor or I will be authorised to use and/or disclose your anonymised information in connection with this research study. Any other person wishing to work with your anonymised information as part of the research process (e.g. an independent data coder) will be required to sign a confidentiality agreement before being allowed to do so.

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

The results will be written into a research report that will be assessed. In some cases, results may also be published in a scientific journal. In either case, you will not be identifiable in any documents, reports or publications. You will be given access to the study results if you would like to see them, by contacting me.

WHO IS ORGANISING AND FUNDING THE STUDY? The study is being organised by me, under the guidance of my research supervisor at the Department of Environmental Health in the University of Johannesburg. This study has not received any funding.

WHO HAS REVIEWED AND APPROVED THIS STUDY? Before this study can be allowed to start, it will be reviewed in order to protect your interests. This review will be done by the Faculty of Health Sciences Research Ethics Committee at the University of Johannesburg. In addition, the Ekurhuleni Research Committee will approve that the study take place in Ekurhuleni Metropolitan Municipality.

WHAT IF THERE IS A PROBLEM? If you have any concerns or complaints about this research study, its procedures or risks and benefits, you should ask me. You should contact me at any time if you feel you have any concerns about being a part of this study. My contact details are:

Lesego Kgolane

0762978901/011 999 1675

Lesegokgolane@gmail.com / Lesego.Kgolane@ekurhuleni.gov.za

You may also contact my research supervisor:

Ms Charlotte Mokoatle

Chalottem@uj.ac.za

If you feel that any questions or complaints regarding your participation in this study have not been dealt with adequately, you may contact the Chairperson of the Faculty of Health Sciences Research Ethics Committee at the University of Johannesburg:

Dr Stein

011 559 6564

cstein@uj.ac.za

FURTHER INFORMATION AND CONTACT DETAILS: Should you wish to have more specific information about this research project information, have any questions, concerns or complaints about this research study, its procedures, risks and benefits, you should communicate with me using any of the contact details given above.



7.4 APPENDIX D: RESEARCH CONSENT FORM

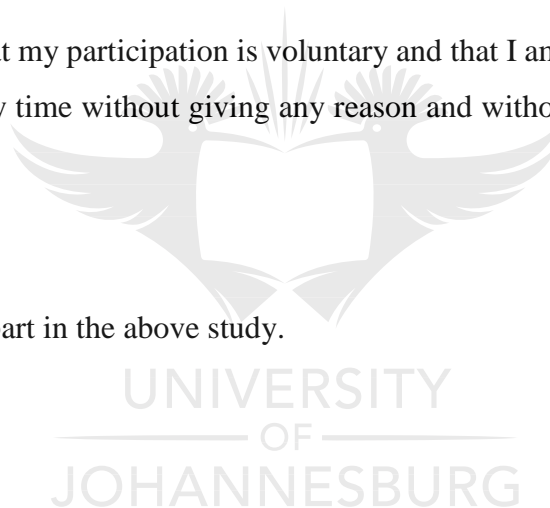
Assessing the practices of Environmental Health Practitioners inspecting informal food traders

Please initial each box below:

I confirm that I have read and understand the information letter dated 04 April 2017 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw from this study at any time without giving any reason and without any consequences to me.

I agree to take part in the above study.



Name of Participant

Signature of Participant



Date

Name of Researcher

Signature of Researcher

Date

7.5 APPENDIX E: EKURHULENI HEALTH RESEARCH COMMITTEE CLEARANCE CERTIFICATE



**EKURHULENI RESEARCH
CLEARANCE CERTIFICATE**

Research Project Title: An assessment of the practices of Environmental health Practitioners inspecting informal food traders.

Research Project Number: 09/03/2017-4

Name of Researcher(s): Mr Lesego Kgolane

Division/Institution/Company: University of Johannesburg

DECISION TAKEN BY THE EKURHULENI HEALTH DISTRICT RESEARCH COMMITTEE (EHDC)

- THIS DOCUMENT CERTIFIES THAT THE ABOVE RESEARCH PROJECT HAS BEEN FULLY APPROVED BY THE EHDC. THE RESEARCHER(S) MAY THEREFORE COMMENCE WITH THE INTENDED RESEARCH PROJECT.
- NOTE THAT THE RESEARCHER WILL BE EXPECTED TO PRESENT THE RESEARCH FINDINGS OF THE PROPOSED RESEARCH PROJECT AT THE ANNUAL EKURHULENI RESEARCH CONFERENCE.
- THE RESEARCH COMMITTEE WISHES THE RESEARCHER(S) THE BEST OF SUCCESS.

DR. JOSEPH SEPWYA
DEPUTY CHAIRPERSON: EKURHULENI METROPOLITAN MUNICIPALITY
Dated: 2017/3/14

Dr. Renel Kelleman
CHAIRPERSON: GAUTENG DEPARTMENT OF HEALTH (EKURHULENI REGION)
Dated: 2017/03/14

7.6 APPENDIX F: UJ HIGHER DEGREES COMMITTEE APPROVAL



UNIVERSITY
JOHANNESBURG

FACULTY OF HEALTH SCIENCES

RESEARCH ETHICS COMMITTEE

NHREC Registration no: REC-241112-038

REC-01-83-2017

21 August 2017

TO WHOM IT MAY CONCERN:

STUDENT: KGCLEANE, I.
STUDENT NUMBER: 290711937

TITLE OF RESEARCH PROJECT: Assessing the Practices of Environmental Health Practitioners
Inspecting Informal Food Traders

DEPARTMENT OR PROGRAMME: ENVIRONMENTAL HEALTH

SUPERVISOR: Mrs C Mokoatle **CO-SUPERVISOR:** Dr V Nkozi

The Faculty Academic Ethics Committee has scrutinised your research proposal and confirm that it complies with the approved ethical standards of the Faculty of Health Sciences; University of Johannesburg.

The REC would like to extend their best wishes to you with your postgraduate studies.

Yours sincerely,

Dr C Stein

Chair : Faculty of Health Sciences REC

Tel: 011 559 6564

Email: cstein@uj.ac.za

7.7 APPENDIX G: UJ ACADEMICS ETHICS COMMITTEE APPROVAL



UNIVERSITY
JOHANNESBURG

FACULTY OF HEALTH SCIENCES

RESEARCH ETHICS COMMITTEE

NHREC Registration no: REC-241112-038

REC-01-83-2017

21 August 2017

TO WHOM IT MAY CONCERN:

STUDENT: KGCLANE, I.
STUDENT NUMBER: 200711937

TITLE OF RESEARCH PROJECT: Assessing the Practices of Environmental Health Practitioners
Inspecting Informal Food Traders

DEPARTMENT OR PROGRAMME: ENVIRONMENTAL HEALTH

SUPERVISOR: Mrs C Mokoatle **CO-SUPERVISOR:** Dr V Nkosi

UNIVERSITY
OF
JOHANNESBURG

The Faculty Academic Ethics Committee has scrutinised your research proposal and confirm that it complies with the approved ethical standards of the Faculty of Health Sciences; University of Johannesburg.

The REC would like to extend their best wishes to you with your postgraduate studies.

Yours sincerely,

Dr C Stein

Chair : Faculty of Health Sciences REC

Tel: 011 559 6564

Email: cstein@uj.ac.za

7.8 APPENDIX H: CITY OF EKURHULENI ENVIRONMENTAL HEALTH DIVISIONAL HEAD APPROVAL AND SUPPORT

Lesego Kgolane

From: Jerry Chaka
Sent: Thursday, August 31, 2017 8:15 AM
To: Lesego Kgolane; Sibusiso Madlala
Cc: Nomvula Sirenge
Subject: RE: M-Tech Degree Progress and much needed support for data collection phase

Mr Madlala
Provide Lesego with the necessary support required.

Mr. Jerry Chaka
Divisional Head Environmental Health
Health and Social Development Department
Alberton Civic Center
6th Floor Room 0615
ALBERTON
Tel : 011 999 2969/70
Cel. 0824547090
Fax 011 861 8835

From: Lesego Kgolane
Sent: Tuesday, 29 August 2017 9:55 AM
To: Sibusiso Madlala <Sibusiso.Madlala@ekurhuleni.gov.za>
Cc: Jerry Chaka <Jerry.Chaka@ekurhuleni.gov.za>
Subject: M-Tech Degree Progress and much needed support for data collection phase

Good day Mr Madlala

As discussed on Friday, 25 August 2017, I would like your full support with regards to the Master's Degree in Environmental Health which I have embarked upon.

I am currently at the data collection phase of my studies, having received approvals from the following research regulatory bodies, as attached:

1. Ekurhuleni Research Committee
2. University of Johannesburg Higher Degrees Committee
3. University of Johannesburg Ethics Committee

What does the data collection phase entail?

1. EHPs dealing with and inspecting informal food traders will be required to fill in questionnaires pertaining to EHP practices.
2. EHP files of informal food traders will be evaluated by use of a checklist.

What support is needed from Corporate Office?

1. The most accurate number of EHPs operating with the City of Ekurhuleni
2. A full list of all EHPs
3. Contact details of Regional Managers, managers and preferably Senior EHPs, for easy coordination of the process, and effective communication throughout the process.

When is the above information needed?

7.9 APPENDIX I: STATKON PROOF OF CONSULTATION

DEPARTMENT OF ENVIRONMENTAL HEALTH
DEPARTEMENT OMGEWINGSGESONDHEID

RESEARCH STATISTICS

This serves to confirm that the following student has discussed the research methodology with me as the supervisor, and as such may consult with STATKON regarding the data collection tools and statistical analysis of the research.

Research Title: **ASSESSING THE PRACTICES OF ENVIRONMENTAL HEALTH PRACTITIONERS INSPECTING INFORMAL FOOD TRADERS**

Student Name: **LESEGO KGOLANE**

Student Number: **200711937**

Student Contact number: **076 297 8901**

Supervisor: **MS. CHARLOTTE MOKOATLE**

Supervisor Contact number: **011 559 6229**

Signed:

Date: 06/04/2017

This serves to confirm that the abovementioned student has discussed the relevant data collection tools and statistical analysis of the data that will be collected during the proposed research, with STATKON.

Statistician Name: *Jaclyn de Klerk*

Signed:

Date: 6 April 2017

OFFICIAL ADDRESS | Cnr. Kingsway and University Road Auckland Park
PO Box 524 Auckland Park 2006 | Tel: +27 11 559 4555 | www.uj.ac.za
Auckland Park Bunting Campus | Auckland Park Kingsway Campus
Doomfontein Campus | Soweto Campus



**7.10 APPENDIX J: CITY OF EKURHULENI MANAGER OR SENIOR EHP
INTERVIEW**

DATE COMPLETED		
REGION		
SERVICE DELIVERY AREA/OFFICE		
MANAGER/CONTACT PERSON		
	YES	NO
Explained purpose of being there		
Shared copies of Ekurhuleni Research Committee Clearance Letter		
Shared Copies of HDC and Ethics Committee approval letters		
Shared supportive emails from DH		
Got a contact person for collection of questionnaires		
Total number of informal food traders in area		
10 percent of total population is:		
Date estimated for collection of questionnaires		
Any Additional Notes		

Researcher Signature: _____