

**CARE NEEDS OF THE FRAIL ELDERLY  
AT HOME IN MATWABENG**

**BY**

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Submitted in fulfilment of the requirements in respect of the

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***“If you don't use it, you'll lose it”***

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# **DECLARATION OF OWN WORK**

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I, Elizabeth Catharina (Bets) Nieuwenhuis, declare that the Master's Degree dissertation which I am submitting to the University of Free State for the Master's Degree qualification in Nursing is my independent work and has not been submitted to any other university for a qualification. I am aware that, should the dissertation be accepted, I must submit additional copies as required by the relevant regulations at least six weeks before the next graduation ceremony, and that the degree will not be conferred if this regulation is not fulfilled with.

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# **SUMMARY**

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Worldwide the population of the elderly is growing larger. South Africa experiences the same significant ageing phenomenon as the rest of the world, with the number of persons aged 65 and older increasing yearly. The elderly population in Matwabeng (Senekal), that forms a part of the Thabo Mofutsanyane Local District Municipality in the Free State, shows the same international tendency. It is ageing population place a greater burden for care on several resources, including relatives, caregivers, communities, the Department of Health, Department of Social Development and other relevant non-governmental organizations.

Ageing populations have a significant impact on all types of health care provision, because the increasing years may not necessarily be spent in good health. Added to the escalation in the number of chronic medical conditions that forms part of the natural ageing process, and elderly care becomes more complicated. The growing number of older people in communities inevitably leads to an increased demand for nurses to work with the elderly. More, older persons visiting local clinics brings an increase in chronic medical conditions, while the existing clinics are already being overcrowded. Primary health care services encounter pronounced challenges in providing frail care services to the elderly due to the cumulative effects of the variety of chronic medical conditions that need more nursing attention than can be provided during a single visit. Frail care services need a new innovative plan to address the needs of the elderly in the community because current primary health care services cannot provide for all the various needs of frail elderly residents in in a community.

Furthermore, there are not enough resources to accommodate all the frail elderly in residential care facilities in their own communities. Literature on the requirements and care of the frail elderly is extremely limited and to plan for the rational long-term care of these people, more information is needed. This study aimed to determine specifically what the care needs of the frail elderly living at home were. This will assist the decision makers in planning in caring for this growing group of people. In order to determine the needs of frail elderly residing at home, the researcher examine the frail elderly living in Matwabeng with regard to their needs by means of questionnaires.

# ***LIST OF ABBREVIATIONS***

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ADL	Activities of daily living
ATM	Automated teller machine
CCMDD	Centralised chronic medicine dispensing & distribution
DOH	Department of Health
DSD	Department of Social Development
GCS	Glasgow Coma Scale
HSREC	Health Sciences Research Ethics Committee
Katz ADL	Katz Instrument of Independence instrument
MEC	Member of the Executive Committee of South Africa
NAWONGO	National Association of Welfare Organisations and Non-Government Organisations
NCD	Non-communicable diseases
NGOs	Non-governmental organizations
SADHS	South African Demographic and Health Survey
SANC	South African Nursing Council
SASSA	South Africa Social Service Agency
SAPS	South African Police Service
The Lawton IADL scale	
	The Lawton Instrumental Scale
UFS	University of the Free State
WHO	World Health Organization

# ***DEFINITIONS***

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The main concepts that will be used in the study include the following:

- Care needs
- Elderly (Older Persons)
- Frailty
- Frail elderly
- Frail care
- Matwabeng.

The concepts used in the study have many different definitions which should be taken into consideration in deciding on a single definition for this study. The definitions that have been chosen are:

## **CARE NEEDS**

Care needs consist of health needs that are often ambiguous and rapidly changing because of the complex life necessities of the frail elderly. The frail elderly is a growing subpopulation that poses challenges to the health care system because of rising population care needs and expenditure. Care needs consist of palliative care, primary care, acute care and home care. Home care is usually uncomplicated care provided in the residence of a frail elderly person (Hirdes, 2006:329-330; Naess, Kirkevold & Hammer, 2017:1-10).

The Katz ADL defines care needs per the activities of daily living (Addendum A). These activities are divided into six components, namely bathing, dressing, toileting, transferring, continence and feeding of a frail elder. Furthermore, care needs include physical, socioeconomic and health care needs. An elderly person is seen as independent if he / she need no supervision, direction or personal assistance. Alternatively, frail elderly people are dependent and need supervision, direction,

personal assistance or total care (Shelkey & Wallace, 2012:2; Wallace & Shelkey, 2008:68).

In the study, care needs of the frail elderly refers to the care that the frail elderly requires for their daily activities, specifically the need to bath, dress, perform toileting, transferring, continence and feeding. For the study we want to know what type of care the frail elderly particularly need, as the ability to perform activities determines a frail elderly person's level of dependence.

## **THE ELDERLY (OLDER PERSONS)**

WordWeb defines the elderly as an older person advanced in years. "Elderly" is also defined as aged, older or senior (WordWeb, 2017).

The Older Persons Act defines an older person in South Africa as someone who is 60 years of age and / or older (Older Persons Act, 2006).

For this study, the definition of the Older Persons Act will be used, namely that an older person is a person who is 60 years of age or older and referred to as "elderly".

## **FRAIL(TY)**

WordWeb defines "frail" as "physically weak". Frail is also described as delicate, fragile and puny, and frailty as the state of being weak in health or body [especially from old age] (WordWeb, 2017).

Frailty: The state of being weak in health or body [Especially from old age] (Rockwood, Fox, Stolee & Robertson, 1994:489-495).

For the purpose of this study, frailty is defined as being dependent on others for two or more ADL (Rockwood *et al.*, 1994:489; Shelkey & Wallace, 2012:2; Wallace & Shelkey, 2008:68).

A blend of the Katz ADL (Addendum A) and The Lawton IADL scale (Addendum B) was used in Part One of the questionnaire to determine the activities of dependence of the frail elderly as a guideline and reference in the study for the fieldworkers, as it was required. The elderly persons would have to provide feedback on their level of dependence or independence on each activity provided in Part One of the questionnaire, so as to identify those that qualify as “frail” elderly (Addendum E). The indicated activities include bathing, dressing, toileting, transferring, continence and feeding (Shelkey & Wallace, 2012:2; Wallace & Shelkey, 2008:68). Part One of the questionnaire and the Katz ADL state that a person is frail if he / she needs assistance in two or more ADL.

## **FRAIL ELDERLY**

The term “frail elderly” means that the focus is on the health-related conditions of these persons, limiting their independence and increasing elderly’ need for assistance and dependency on others. This type of elderly persons has serious health problems and are therefore more vulnerable to disease and harm (Clegg, Young & Iliffe, 2013:752; Fernandez, Byard & Lin, 2002:68 ).

For the sake of this study, a frail elderly were a person over the age of 60 years, who has been determined as being frail by using Part One of the questionnaire, based on the Katz ADL and The Lawton IADL scale. If the participant needs assistance with two or more ADL, or answered “NO” to two or more questions, that person were deemed to be a frail elder.

## **FRAIL CARE**

Frail care means attention or treatment for elderly persons who cannot function independently and need assistance (Older Persons’ Act, 2006:6).

## **MATWABENG**

Senekal is a rural town in the Thabo Mofutsanyane district of the Free State province, while Matwabeng is a township that forms a part of Senekal.

# ***KATZ INDEX OF INDEPENDENCE***

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The Katz Index of Independence instrument commonly referred to as the Katz ADL (Addendum A) clearly indicates the activities of dependence that will be used as a guideline and reference for the fieldworkers, when required by the study circumstances. The elderly must give feedback on their level of dependence or independence on each activity provided on the scale. As indicated, the activities include bathing, dressing, toileting, transferring, continence and feeding (Shelkey & Wallace, 2012:2; Wallace & Shelkey, 2008:68). The Katz ADL states that a person is frail if he / she need assistance with two or more ADL.

# ***LAWTON INSTRUMENTAL SCALE***

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The main aim of The Lawton Instrumental ADL scale referred to as The Lawton IADL scale (Addendum B) is to assess the level of frail elderly self-maintenance and instrumental activities of daily living. It consists of eight functional activities that closely resemble the person's highest functional level, namely: 1) the ability to use a telephone, 2) shopping, 3) food preparation, 4) housekeeping, 5) laundry, 6) mode of transportation, 7) responsibility of own medication and, 8) ability to handle finances (Graf, 2008:56).



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# **CHAPTER 1**

## ***Introduction to the study***

---

### **1.1 INTRODUCTION**

The world is aging, with a subsequent and significant increase in the number of the world's elderly population. Currently, 8.5% (617 million) of the world's population is aged 65 or older. According to He, Goodkind and Kowal (2016:1,3) this percentage is projected to increase to nearly 17% (1,6 billion) by 2050. South Africa experiences the same significant ageing phenomenon, with persons aged 65 and over increasing from a mere 490 000 persons in 1950 to more than 2.7 million at present, which is expected to increase to 5.7 million by 2050 (Cire, 2016:1; Goodrick & Pelsler, 2014:649; Sharp, Moran & Kuhn, 2013:657).

### **1.2 BACKGROUND**

The elderly population in Matwabeng (Senekal), which forms part of the Thabo Mofutsanyane Local District Municipality in the Free State province of South Africa, shows the same tendency. In 2011 the Free State's elderly population ( $\geq 60$  years) consisted of 228 789 persons (Statistics South Africa, 2011:30). This increased to 245 639 in 2016 (Statistics South Africa, 2016b:6-7), an increase of 16 850 in five years. In 2011 the Thabo Mofutsanyane district's elderly population consisted of 61 109, growing to 62 896 by 2016, an increase of 1 787 persons in five years. These statistics confirm that the growth of the elderly population in Thabo Mofutsanyane district and in the Free State is similar to that of the rest of the world (Statistics South Africa, 2016b). However, when considering the present number of the frail elderly, there are no statistics available in South Africa or from Thabo Mofutsanyane since 2016.

An increasing aged population places a greater burden of care on several resources, including relatives, caregivers, communities, the Department of Health (DOH), Department of Social Development (DSD) and on non-governmental organizations (NGOs) that offer services to the poor. At the same time, an ageing population will have a significant and cumulative impact on health care provision, as the increasing years may not necessarily be spent in good health or social conditions and the need for assistance grows. Add to that, there is an increase in the severity of the chronic medical conditions that form part of the natural ageing processes, such as arthritis, diabetes mellitus and hypertension. The growing number of older people will heighten the demands for nurses working with the elderly: More, older persons will visit local clinics with a greater number of complaints, while the existing public health care clinics are already overcrowded. Primary health care services already encounter increasing challenges in providing frail-care services to the elderly that just need nursing attention. Primary frail-care services would need a new, more innovative plan to address the needs of the elderly in the community (Ananias & Strydom, 2014:269; Gaskell, Derry, Moore & McQuay, 2008:1; Looman, Huijsman & Bouwmans-Frijters, 2016:154).

Ageing is associated with a deterioration of the body, resulting in frailty. This implies a greater reliance on outside help to cope with the ADL. Irrespective of the various resources available in different countries, universally there will always be challenges on social, economic, environmental and political levels. Added to the mix, one must consider the personal preferences of the elderly. Many of the elderly want to age in their own homes for as long as possible and do not want to be dependent on anybody. They prefer to remain and live in their communities for as long as possible, even when faced with limitations due to illness and / or disability (Casado, Van Vulpen & Davis, 2011:530; Cohen-Mansfield & Frank, 2008:505; Hoedemakers, Leijten & Looman, 2019:1).

Literature indicates that the frail elderly currently has three choices, namely to remain in their homes and receive home-based care services; being cared for in a frail care facility (residential care); or home-sharing. Frail care facilities are currently found either in retirement villages or in special homes for the elderly, now called residential care facilities (Froneman, Van Huyssteen & Van der Merwe, 2004:423).

### **1.2.1 Community Health care services**

Community health care services for the elderly in the Free State are currently mostly rendered at primary health care level by local municipal clinics, with the involvement of the community, Non-governmental organisations (NGOs) and volunteers, consisting of family members and sometimes friends. Some of the volunteers provide frail care to the elderly on a daily basis, without any compensation, and / or without having received any training (While, 2015:466).

Care for the elderly does not seem to be a priority of the health care establishment. The Swedish National Board of Health and Welfare (Anell, Glenngard & Merkur, 2012:76) concluded that there is a shortage of specialist geriatric care nurses, which is expected to worsen as the proportion of older people continues to grow. This poses a serious threat to a vulnerable and complex population with multiple diagnoses, as the demand for registered and specialised nurses working with older persons will keep on increasing. What is more alarming is that Swedish student nurses described elderly care as a less desirable sub-discipline to follow, which is cognitively undemanding, depressing, repetitive and unchallenging. It has been concluded by several previous studies that working with older people is seen as a less valued learning curve by student nurses (Carlson & Idvall, 2015: 849-850). Preparing students to meet the demands of an ageing population is therefore more challenging and a huge task for nursing educators, not only in Sweden, but also internationally. The inclination to work with older people seems to decline further as student nurses progress through the nursing programmes. Nurses of all ages and categories seem to have a similar negative view of working with ageing patients (Carlson & Idvall, 2015:849-850; Stevens & Crouch, 1995:233).

### **1.2.2 Geriatric care in South Africa**

The situation in South Africa does not look better: The course in post basic Geriatric Care at the University of the Free State (UFS) has been terminated due to a lack of interest from registered nurses (Vermeulen, 2016). The South African Nursing

Council (SANC) statistics of 4 January 2016 show that only one registered nurse was listed as qualifying in the Certificate in Geriatric Nursing in 2014 and none in 2015. For the Certificate in Gerontology Nursing Science in 2014, only 11 registered nurses were noted, and in 2015, only 10 registered nurses were added to the Nursing Council's registers (SANC, 2016:36-38). From this data it is apparent that specialised nurses are not being trained for working with the elderly, and that gerontology does not seem to be a highly desirable area of nursing. Although literature on the care of the elderly is abundant, specific literature referring to the care of the frail elderly is limited. This seems to indicate a general lack of interest, especially in the care of the frail elderly.

Let us consider the situation as it stands in the Free State: According to the DSD's new policies for post-apartheid South Africa, transformation of residential care facilities (previously known as old-age homes) has brought a change of the expectations and perceptions of the elderly to the DSD, the residential facilities and communities. Traditional old-age homes for the elderly were coned into democratic residential care facilities for care of all races in need of 24-hour frail care services. However, operating a frail care residential facility is one of the most costly services in the care of the elderly and not affordable for most of the elderly community. Due to their numbers, not all the frail elderly can enter a residential care facility to receive specialised care. Present residential care facilities can only accommodate a small percentage of all the frail elderly in a community, as confirmed by the study of Froneman, et al., (2004:423). The problem furthermore with frail care subsidised by the DSD in a residential care facility is that only a small percentage of the elderly qualify for such care. The person's only income should be a social grant, i.e. monies paid by DSD for frail elderly care in the residential facility. This social grant (their old age pension) as subsidy is insufficient to cover the monthly unit cost for a frail elder in the facility. Family or siblings therefore have to supplement the grant (DSD, 2010:1). Most family members cannot afford to pay this additional cost monthly. There is subsequently an increasing number of frail elderly in the community who received only a social grant and cannot afford residential care if one compares their income to the cost involved for care in a residential facility. The only solution for these frail elderly is to remain in their homes as long as possible, as there is no alternative funding from DSD. This is not necessarily an unwelcome solution for the

elderly, as research has proven that many prefer to remain in their own homes for as long as possible (Froneman et al., 2004:424).

The DSD, in an attempt to address the issue, brought out a policy in 2004 (DSD, 2004:1) stating that residential facilities had to render community care as part of their service delivery in order to qualify for a government subsidy. The subsidy to residential facilities was divided into two components, namely for residential care and community care. All the residential facilities had to develop their own community plan for service delivery, according to the service specifications from the DSD. Eventually, the services in the community were mainly to provide primary health care in the form of visits for checking blood pressure and blood sugar levels, as well as nail and wound care. Preventative care and meal services were also included in most of the planned amenities for older persons. Unfortunately, these community services are underdeveloped in South Africa, despite the fact that the aim of the service specifications is to enable the older persons to remain with their families within the community for as long as possible (Froneman et al., 2004:424; Goodrick & Pelser, 2014:656).

Extended and multigenerational households depend on family members for care and support of older people. The main providers of informal care to older persons in the communities are their family members. The current socio-economic climate means that a smaller number of family caregivers are available for this function due to increased pressure to find paid employment. These frail persons are more prone to neglect or abuse, because of reduced cognitive or emotional functioning, and the fact that the frail elderly need continuous assistance and help with their daily functioning. Habjanic and Lahe (2012:262) identify five types of elder ill-treatment, namely physical abuse, psychological abuse, financial abuse, sexual abuse and neglect (Ananias & Strydom, 2014:268; Vierthaler, 2004:2-3). The study of Goodrick and Pelser (2014:656) confirms that the South African government has encouraged age-in-place initiatives, as stated in the DSD service specifications, where older persons remain within the community. However, this increases the complexity of the problem of older person abuse as a challenge to frail elder care in the community, as there is no theoretical framework that explains the causes of elder abuse in this setting. Even though the Older Persons Act was implemented in 2006, presently no



register of abuse cases exists in the Free State DSD. Considering this, elder abuse in the community remains a growing, hidden challenge (Ananias & Strydom, 2014:270).

As indicated, the Older Persons Act (Act 13 of 2006) makes provision for community-based care and support services. Presently, the Free State has no functional community model for frail care to the elderly. The DSD service specifications for the 2017 / 2018 financial year stated that the focus of the service project was to provide community-based care and support services to older persons, keeping them functionally independent and living with dignity. The aim was to allow older persons to remain with their families, in their communities, for as long as possible (DSD, 2016:1-2). This included providing care and rehabilitation services to facilitate independent living. To date there is no clear policy, or sufficient staff to implement this plan. As indicated, the study of Goodrick and Pelsler (2014:657) supports the same goal and underlines the fact that there are few policy goals and programmes related to the community care of older persons. In settings where such programmes have been established, they have been found to be financially inefficient, and do not have an effective implementation strategy to include all the existing older persons.

As mentioned we sit with an ageing population. People are getting older which puts an additional burden on family members and communities. If we are going to render an essential service is imperative to gain an understanding of the exact needs of the frail elderly living in the community. This study seeks to address the gap in knowledge and provision of frail care to older persons. This research will attempt to answer the question of what the care needs of the frail elderly at home are.

### **1.3 RESEARCH QUESTIONS, AIM AND OBJECTIVES**

As stated, the frail elderly population is increasing and the resources to care for them are inadequate, especially with the view to institutionalised care. Home-based care seems to be one solution to the problem for the frail elderly living at home in Matwabeng, the question is what are the care needs of the frail elderly living at home in Matwabeng.

**Aim:** This study aims to determine the care needs of the frail elderly living at home in Matwabeng.

**Study objectives were to:**

1. Determine the extent of the population of frail elderly in Matwabeng.
2. Determine the physical, socioeconomic health care needs of the frail elderly living at home.

## **1.4 RESEARCH DESIGN AND TECHNIQUE**

A quantitative research approach with descriptive and exploratory designs/strategies design was used to determine the care needs of the frail elderly in Matwabeng. A two-part questionnaire was designed to identify the physical and socioeconomic health care needs of the frail elderly living at home, using the phases of the Katz ADL and The Lawton IADL scale (Addendum A and Addendum B), as well as appropriate literature (Graf, 2008:56; Shelkey & Wallace, 2012:2; Wallace & Shelkey, 2008:68).

## **1.5 POPULATION AND SAMPLING**

The population for the study included all the elderly (persons 60 years of age or older), residing in Matwabeng. There were no available statistics on the exact number of elderly persons residing in Matwabeng at the time of data collection. As stated previously in this chapter, Matwabeng is part of the Setsoto Municipality, which consists of four towns. According to Statistics SA 2016, the number of elderly aged 65 and over in Setsoto during that census period was 9875 (Statistics SA, 2016b).

Simple random sampling was used (Grove & Gray, 2018:304), with the random starting point identified as follows: The length and width dimensions of the area's geometric chart (500 mm x 700 mm) was used by a biostatistician to identify 12 random "starting" points. The biostatistician then selected six random "length" and

“width” distances, with the starting points where these lines intersected (Figure 1.1: Map of Matwabeng and Figure 1.2: Matwabeng from a drone). Three community care workers from Engo Aged Care Senekal were working with the researcher as field workers. They were fluent in English, Afrikaans and Setsoto. Each started at an identified point in Matwabeng and walked clockwise around each block of houses. Each house in the block was included in a door-to-door visit, with the field workers enquiring whether any possible elderly persons whose data could be collected, was living in the house.

This sampling size that was aimed for is 100 frail elderly persons (N=100). As determined in collaboration with a Biostatistician from the Department of Biostatistics of Faculty of Health Science by calculating the following: The last number of elderly identified by census in the Setsoto area who were 65 years or older was 9875 (Statistics South Africa, 2016b). According to the statistics of 2016b, the elderly comprised 8.3% of the total population in the Setsoto municipality (117 632 persons). Using the 8.3% from statistics SA as an estimated percentage of elderly and using the same estimated percentage for the frail elderly [8.3%] out of 9875 were 819. This provided an estimated total number of frail elderly in Setsoto of 819. As Setsoto municipality comprises of four towns, the estimated number of frail elderly per town were 205. Taking the above mentioned data in consideration, the researcher in collaboration with a Biostatistician aimed to sample half of the estimated frail elderly in Matwabeng.



**FIGURE 1.1:** Map of Matwabeng



**FIGURE 1.2: Matwabeng, viewed from a drone**

Random starting points prevented selection bias, as the researcher would not have control over where the study would start. Every willing elderly person were interviewed in each home by the field workers, who would complete Part One of the questionnaire. The aim is to collect the biographical data and to determine whether the person qualifies as a frail elderly person. If so, Part Two of the questionnaire would assess the needs of the identified frail elder. If the field workers found no frail elder in the door-to-door search per block of houses, they would start at another point, as indicated with a marked cross. The field workers would keep walking clockwise around the residential blocks, until they reached all the frail elderly available.

### **1.5.1 Inclusion criteria**

Frail elderly found residing in the visited houses, who speak Sesotho, Afrikaans or English, was included in the study, if willing and able to provide voluntary informed consent, and were physically well enough to participate.

## 1.5.2 Exclusion criteria

- Frail elderly was unwell,
- Frail elderly who fail to understand the language spoken,
- All frail elderly, who reside in residential care facilities, will be excluded.

## 1.6 PILOT STUDY

A pilot study is used in quantitative research to increase the validity and reliability of the data. It is sometimes also referred to as a feasibility study (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:257; Gray, Grove & Sutherland, 2017: 753,956; Polit & Beck, 2017: 177). In this study, the researcher plans to include a pilot study.

A pilot study is literally a trial run of the research method to determine the feasibility of the study (Meadows, 2003:568). The purpose of this pilot study would therefore be to determine:

- Whether both questionnaires are understandable to the field workers and participants
- If the fieldworkers are competent in implementing the questionnaires
- The time it takes to complete the set of questionnaires.

Although the three field workers working as carers at Engo Aged Care was trained by the researcher prior to the start of the study, the pilot study also served as a final opportunity to determine whether they could cope with conducting the interviews. The pilot was conducted on persons from the Ithuseng Luncheon Club for elderly persons living in Matwabeng (Addendum C: Ithuseng Luncheon Club Consent).

The questionnaires were piloted by the three field workers. Each field worker conducted two structured interviews, in total six people. The purpose of this part of the pilot study was just to check if the respondents understood the questions and to determine the time that it took to conduct the interviews. The elderly respondents in the pilot study were not frail and will not be included in the final data analysis. As the

respondents in the pilot study were not frail the data obtained from these interviews were excluded from the data analyses in the main study.

## **1.7 DATA COLLECTION**

Researchers do not have the right to barge into communities and need to respect the communities themselves and their prospective respondents. Any researcher seeking access to a community must keep this in mind. Research must be done in a respectful manner, e.g. through greeting individuals, introducing you to them, explaining the process and asking for permission to carry on, before starting the project.

### **1.7.1 Entry into the community**

The group of private residential care centres where the researcher works as a manager requires that the individual centres conduct outreach programmes into their communities. As the researcher is already part of the local community outreach program, her credentials and entry into the field is already established. The prospective field workers are current members of the community, but do not have any relationships with members of authority in the community of Matwabeng that could bias their work. The ward councillor of the Setsoto community council was consulted and informed about the research study taking place in Matwabeng, as was the chairperson of the Ithuseng Luncheon Club.

### **1.7.2 Procedure**

The field workers approached each targeted house to enquire if there were any elderly living in the house. If there was an elderly person living there, they explained the purpose and procedure of the research and determined whether the elderly person was willing to participate. After informed consent was received from the respondents, written consent was obtained by the frail elderly or family member (Addendum D). Part One of the questionnaire (Addendum E) was implemented to determine whether the person qualifies as a frail elderly person. If the person was

not frail, the fieldworker would move to the next home. However, if Part One of the questionnaire indicated that the person was indeed frail, then Part Two of the questionnaire (Addendum F) was completed per structured interview with the frail elderly to assess the care needs of this individual.

Each person who indicated that they were willing to participate was given an information sheet (Addendum G). If they consented to participate, they were required to sign the consent form. Interviews were conducted in Afrikaans, English or Sesotho, according to their own preference. If it was required, the field worker read the document(s) to the frail elderly respondent and helped them to complete the two-part questionnaire during the structured interview.

In order to maintain confidentiality and for record purposes, the field workers placed the completed questionnaires in a sealed A4-envelope containing the coding number of each respondent. This envelope was then kept in a locked briefcase until delivered to the researcher, at most within 24 hours. The researcher transferred the sealed envelopes to her office where it was stored in a locked filing cabinet.

During data analysis, both parts of the questionnaire were assigned numbers on a specially designed Excel spread sheet; while the list of corresponding names and addresses were stored in a locked filing cabinet in the researcher's office. Confidential respondent's addresses as mentioned in the information sheet (Addendum G) were recorded and protected in case the researcher discovers that an individual follow-up is required.

## **1.8 DATA ANALYSIS**

During analysis, descriptive statistics will be calculated from the collected data, namely frequencies and percentages for categorical data and means and standard deviations, or medians and percentiles for numerical data. The analysis will be done by the Department of Biostatistics, Faculty of Health Sciences, UFS.



## **1.9 VALIDITY AND RELIABILITY**

Validity and reliability ensure confidence in the results of a research study and are important aspects to address from the planning stage of the process (Greco, Walop & McCarthy, 1987:699; Grove & Gray, 2018: 253,338).

### **1.9.1 Validity**

Validity refers to the extent to which the correct method of measurement is used (Du Plooy-Cilliers et al., 2014:256; Maree, 2007:305). In this study, validity refers to the legitimacy of the questionnaire. The questionnaire will require two aspects of validity, namely face validity and content validity.

#### **1.9.1.1 Face validity**

Face validity is the weakest type of validity, as it just means that a superficial examination of the instrument is done to ensure satisfaction. On its own, face validity is not a very trustworthy form of validity, but it can add value when testing a pre-test, and the final product (Brink Van de Walt & Van Rensburg, 2018:152; Polit & Beck, 2017: 310).

In this study, face validity will be assessed by giving a set of the questionnaires to an independent registered nursing colleague at the residential facility, and one to a registered nurse at the local clinic to evaluate the contents and quality as a questionnaire.

#### **1.9.1.2 Content validity**

Polit and Beck (2017:310) stated that a content validity measurement must account for all the elements of the concept that is being investigated. Therefore the study's validity instrument must cover all aspects of the content that is going to be measured. Content validity is achieved when the content in the questionnaire is

based on factors such as available literature, discussions with other experts in the field and personal experience (Cohen, Manion & Morrison et al., 2018:257; Grove & Gray, 2008:341).

The study's questionnaire will consist of two parts. Part One of the questionnaire will be based on phases from The Lawton IADL scale (Graf, 2008:56) and Katz ADL (Shelkey & Wallace, 2012:2; Wallace & Shelkey, 2008:68). These will be used to assess the participants' activities of daily living to determine whether a person would qualify as a frail elder.

Part two of the questionnaire will be structured by using available literature and data aligned with the objectives of the study, discussions with other Primary Health Care nurses, as well as the researcher's own 28 years' of personal experience in geriatric care, in order to assesses the needs of the frail elderly in Matwabeng.

### **1.9.1.3 Reliability**

Reliability refers to the consistency or accuracy in which any measurement or assessment is being done among all the participants (Broomfield, 2016:34, Huck, 2012:68).

In striving for reliability, the field workers will be trained and assessed by the researcher prior to commencement of the study, as well as be given accompaniment and experience with real participants during the pilot study.

## **1.10 ETHICAL ISSUES**

Three ethical principles considered essential in this research study are those found in the Belmont Report (1976), namely respect for people, beneficence and justice. It is important to note that the proposed frail, elderly participants in this research study are a vulnerable group who must be approached with circumspection and respect (Cohen et al., 2018:240; Walsh, 2009:1-13).

### **1.10.1 Respect for people**

Respect includes the right to self-determination and choice for all participants. All participants must be allowed to give voluntary informed consent (Grove & Gray, 2018:143). The right to full disclosure requires that they be provided with all the relevant information regarding the research process, e.g. in an inclusive information brochure. The information must be available to them in their language of choice.

### **1.10.2 Beneficence / Non-maleficence**

It is important to protect the frail elderly and participating individuals from the risk of significant harm when conducting a research study (Botma, Greeff, Mulaudzi & Wright, 2010:7; Broomfield, 2016:32-38; Polit & Beck, 2017:139). The proposed questionnaire for the study holds no risk to the frail elderly, thus addressing any contentious traumatic experiences. Therefore, the principle of non-maleficence was adhered to.

Simultaneously, there are no direct or immediate benefits for the participating frail elderly. Indirectly however, the anticipated knowledge can be of great value for planning the future of frail care in the Free State province, and even in South Africa.

When working with the frail elderly, provision must be made for referral of cases that might need counselling for any social or other problems, as may be identified by the field workers during the home visits. Referral is something that should only be done with the participant's consent. As a participant would then be counselled to give consent to this, confidentiality would no longer be an issue. Cases could then be referred to the relevant organisations or local clinics.

### **1.10.3 Justice**

The accessible frail elderly in Matwabeng would all have an equal opportunity to participate in the research study, as using a randomised trial method is proposed. Selection bias would therefore be prevented and the right to fair treatment

automatically assured. The right to privacy and confidentiality will be maintained by separating any identifying data from the completed questionnaires and keeping all data under lock and key.

Finally, the study will submit for approval to the Health Sciences Research Ethics Committee (HSREC) of the UFS [UFS-HSD 2018/1092/2711] (Addendum H).

## **1.11 THE SIGNIFICANCE OF THIS STUDY**

A growing, older population depends more on health care due to their frailty and the fact that people are living longer. Economically, frail care in large residential facilities is not affordable for most of the frail elderly in our communities. Yet communities and health care facilities are not prepared by any means for the present challenges or future opportunities provided (or demanded) by increasing aging populations (Cire, 2016:1; Hoedemakers et al., 2019:1).

There is little documented knowledge available in the field of gerontology or concerning the needs of the frail elderly. Although there were no direct benefits to the frail elderly participants, their responses and comments would indirectly help future research and planning re the frail elderly and elder care. The research findings of this study could provide information to future stakeholders from the government or legislative sectors on what health care the frail elderly needs and what the shortfalls are in current policies and elderly programs. Knowledgeable future planning will be required to optimize finance and human resources.

This study will help to fill the growing knowledge gap.

## **1.12 SUMMARY**

Chapter 1 has provided a brief overview and explanation of the research process that will be followed. The problem statement was outlined, the research purpose summarised, while the research design and data collection methods were described shortly.

In the next chapter, a review of the literature on the care needs of the frail elderly will be provided.

# **CHAPTER 2**

## ***Literature review***

---

### **2.1 INTRODUCTION**

The previous chapter described the outline of the study. This chapter will give an overview of the relevant literature that is available on the subject of the care needs of the frail elderly. A search on the electronic database of the University of the Free State Library, the COCHRANE library and EBSCO, surprisingly resulted in only forty matching studies on frail and / or elderly care. It would appear that literature on the care of the elderly, and specifically the frail elderly, is extremely limited.

Literature reviews refer to an overview of the research topic. The purpose of a review is to synthesise the material and to evaluate the topic (Brink et al., 2018: 58,187; Polit and Beck, 2017:54). Mouton (1996:119) describes it as a piece of the puzzle on the map that is being studied, usually described in one chapter. On the other hand, Polit and Beck (2017:87) added and stated that a literature review should not be restricted to only one chapter, but should continually be integrated into all the chapters. This process allows clarification of different concepts; exploration of research already done on the subject matter and helps to identify gaps in the knowledge (Brink et al., 2018; 58; Grove & Gray, 2018:199).

As indicated in Chapter 1, the world's population is increasing in growth, and the number of older persons is keeping pace. This places a greater burden on available resources; increasing the pressure on available health care systems, social services and housing, among others (Liu, Zeng & Li, 2013:1). As people grow older they tend to become frailer and thus more vulnerable. The assumption that old age is always a time of good health and independence, is untrue. Increasing frailty is a reality when working with elderly people (Carstensen, Rosberg & Mc Kee, 2019:35; Verté, De Witte & Verté, 2018:1).

## **2.2 FRAILITY**

Weakness and vulnerability is commonly viewed as frailty (Chen, Mao & Leng, 2014: 433). Disability is similar to frailty as it makes an individual more vulnerable (Lang, Michel & Zekry, 2009:539). It is viewed that frailty leads to physical weakness, poor health, delicacy and disability, which includes trouble getting dressed, bathing and impaired mobility (Fried, Tangen & Walston, 2001:146; Oxford Advanced Learner's Dictionary, 2019; WordWeb, 2017; Walston 2019:1). Frailty is also viewed as a biological syndrome with decreased reserves, and less resistance to stressors that cause decline in multiple physiological systems; increased vulnerability, and adverse outcomes in the elderly (Chen et al., 2014:434; Clegg et al., 2013:752).

## **2.3 FRAILITY IN THE ELDERLY**

Aging leads to frailty. Frailty in the elderly is a clinical syndrome presenting with three or more of the following symptoms: Unintentional weight loss; self-reported exhaustion; weakness in grip- and / or muscle strength; a slow walking speed and low physical activity (Chen et al., 2014:434; Fried et al., 2001:146; Afilalo, Lauck & Kim, 2018:689).

A frail elderly person can be defined as a person 60 years of age or older, who is considered to be frail (Older Persons Act, 2006). The Older Person's Programme of DSD defines a frail elder as an older person whose physical or mental condition renders him or her in need of 24-hour continuous care (DSD, 2009:4).

The impact of frailty causes physical vulnerability with increased dependency, limited mobility, and requiring continuous support. Most of the frail elderly have slow task performance, with balance and gait abnormalities or stressors. They are dependent on the assistance of others, have a high risk of falls, and developing chronic illness. Frailty in the older population has many diverse aspects that need to be considered. Fried et al. (2001:146) have added functional disability, hospitalisation, institutionalization, use of chronic medication, impaired cognition, disorientation and

mortality to the list indicating that frail elderly should not function on their own, as their daily needs are so complex (Dharamshi, 2014:427, Leirós-Rodríguez, Romo-Pérez & García-Soidán, 2020:2).

### **2.3.1 Implications of frailty for the elderly**

As the older population becomes increasingly frail, it becomes necessary to explore the impact of frailty on the individual, as well as on society at large.

### **2.3.2 Impact on the individual**

Frailty affects all aspects of a person's life: Physical, mental, social and economical. For every person, this is a unique journey where some become weaker than others, and different life functions are impacted. All elderly become weaker due to the normal ageing process, but inadequacies mainly on physical, cognitive, social and psychological levels makes it more difficult for some to function independently, and results in increasing levels of dependency (Fried et al., 2004:260). Disability in frail elderly is common due to age-related physical and mental impairment; visual and auditory decline; decrease in mobility, gait, muscle and bone strength; poorer sensory perception and responses to environmental stimuli, as well as any medical and neurological conditions that cause physical disability (Carstensen et al., 2019:35; Crews & Zavotka, 2006:113-117).

### **2.3.3 Physiological factors**

As frail elderly become weaker, they have reduced physiological reserves in all the systems of the brain; the endocrine organs; immune system; skeletal muscles; and lower cardiovascular, respiratory and renal functions (Clegg et al., 2013:753). Physical deterioration is mostly caused by a progressive decline in skeletal muscle mass or sarcopenia (Fried *et al.*, 2004:260, Schröder-Butterfill & Fithry, 2014:363).



As stated by Landi, Abbatecola, and Provinciali (2010:539) that physical inactivity is the main reason for physical disability, which leads to a greater need for medical and mental health care, as well as social services. Frailty requires assistance that reaches beyond mere physical factors, and includes aid within a person's psychological dimensions, cognitive performance, mood conditions, social care support, and attention to the living environment (Landi et al., 2010:538; Buckwalter & Davis, 2011:36).

This deterioration leads to the need for physical care. Physical care is referred to as personal or intimate care, with assistance in the basic ADL. As every frail elder is unique, with individual needs, the level of ADL dependency such as bathing; dressing; toilet and incontinence management; transferring from bed to chair and back to bed and feeding / eating will differ from person to person. For religious, moral or personal reasons, providing physical care is a sensitive matter in all cultures (Fried et al., 2004:260, Schröder-Butterfill & Fithry, 2014:363). Specific care needs should be identified and serviced by multiple providers to ensure that the needs are met as fully as possible. Care needs at home will differ, depending on individual and gender preferences, such as who should provide assistance.

Schröder-Butterfill and Fithry (2014:363) confirm that not much research has been done on the physical care of the frail elderly, which further impacts on the lack of information available regarding the needs of the frail elderly. They further state that it seems that independence for personal care is a universal preference for most frail elderly, which is why aid from family members and / or neighbours is preferred by physically and cognitively impaired frail elderly (Schröder-Butterfill & Fithry, 2014:363).

#### **2.3.4 Mental factors (cognitive impairment)**

Age-related disorders such as dementia and Alzheimer's disease are irreversible and on the increase due to the growing numbers of the frail elderly (Haley, 1983:18).

Literature confirms that there is a lack of information about preventive strategies for all types of cognitive decline and dementia (Landi et al., 2010:541).

#### **2.3.4.1 Care related to cognitive impairment**

Cognitive impairment in the frail elderly is associated with structural and physiological changes in the brain. Dementia like Alzheimer's disease has been identified as a key component of the stress response of frail elderly due to the decline in their cognitive functions. Frailty combined with dementia would indicate that the frail elderly is a high-risk group with adverse outcomes, such as wandering and other behavioural problems (Clegg et al., 2013:754).

Behavioural problems associated with cognitive impairment become more common the older the frail become, including wandering around at night; uncontrolled screaming or crying; confusion and disorientation; asking the same questions repeatedly, and aggressiveness towards carers. Aggressive behaviour is one of the principal problems of dementia, according to Cipriani, Vedovello and Nuti (2011:408). Unacceptable or inappropriate behaviour such as masturbation, increased libido, playing with faeces or urinating in public places can be challenging for carers. Studies have found that sexually inappropriate behaviour is part of all stages of dementia and is common in communities of frail elderly with this condition (Joller, Gupta & Seitz, 2013:255).

Few interventions have been documented to help families care for frail elderly with behavioural problems related to cognitive impairment. Family members that are the main carers need additional support and training to look after persons exhibiting behavioural problems (Dai, Mao & Mei, 2013:2; Maslow & Fortinsky, 2018:20). Unfortunately, carers who do not cope due to lack of skill or knowledge often develop stress, leading to depression, and sometimes, abuse of the frail elder. Knowledge empowers carers to help and keep frail elderly with behavioural problems safe (Clegg et al., 2013:754; Frazão, Silva & Norton, 2014:20).

### **2.3.5 Safety and security**

In 2006, The Older Persons Act of South Africa established a framework aimed at enabling and protecting the frail elderly through the promotion and maintenance of their status, rights, well-being, safety and security. One of the rights of the frail elderly is safety, as published in the Government Gazette, Chapter 3 of the Older Persons Act, Act 13 of 2006. This states that the frail elderly have the right to reside at home for as long as possible, and to benefit from family and community care and protection within the society's system of cultural values (Older Persons Act, 2006), implying both safety in the residential community and in their homes.

Home safety and security has a wide range of implications for the frail elderly, including prevention of accidents in the house, and accidents caused by internal or external factors such as crime. As mentioned in Chapter 1 of this study, the frail elderly mostly prefer to stay at home, and often prefer to die in their own homes (Lum, Lou & Chen, 2016:98). An effective system of caring for this growing frail elder population needs an economic solution, however, and the only really affordable option is that frail elderly do remain in their homes for long as possible, as advised. Nonetheless, it is important to consider whether this is the safest option for this vulnerable population. It is important to maintain and improve frail elderly's safety and independence at home (Gill, Baker & Gottschalk, 2002:1068; Parsons, Senior & Kerse, 2012:86; Dharamshi, 2014:427).

Forces both inside and outside a frail elder's home can, and do, influence their security and safety.

#### **2.3.5.1 Inside the home**

Forces inside the home that impact on the elderly's' security would include aspects of their physical / functional safety; health management; level of cognitive functioning, and management of finances. Frail elderly with functional impairment run an increased risk for harm in the home.

### **2.3.5.1.1 Functional impairment**

While performing ADL at home, possible functional impairment of disabled or frail elderly can lead to falls and other injuries caused by decreased mobility (Nikolaus et al., 2003: 300-305; Leirós-Rodríguez et al., 2020:2;). If the physical disablement is combined with some cognitive impairment, it would worsen with age, leaving the frail elder unable to cope at best, or incompetent at worst.

### **2.3.5.1.2 Cognitive impairment**

As discussed, vulnerability due to cognitive impairment makes it difficult to ensure safety at home and in the community when they are alone. Frail, cognitively impaired elderly (e.g. suffering from dementia) can present with unsafe wandering about; confusion; disorientation; and inappropriate or aggressive behaviour in- or outside their homes. Interpersonal withdrawal would make them difficult to manage by untrained carers. Most frail elderly need some help in managing their medication as well. In the case of persons challenged by cognitive impairment, this assistance is vital (Ananias & Strydom, 2014:270).

### **2.3.5.1.3 Medication control**

Medication compliance is often not optimal among all people on treatment, but especially the use of chronic medication. However, taking chronic medication is a daily reality for most of the frail elderly. Frail elderly also presenting with dementia often demonstrate poorer medication adherence due to their cognitive limitation. Illiteracy or impaired eyesight is another obvious problem, resulting in incorrect dosage; forgetting to take medication, or duplicating dosages more than once (Asada, Kariya & Kinoshita, 1996:22; Clegg et al., 2013:754; Cho, Shin & Chang, 2018:1). Outside the homes of the frail elderly are other forces that influence their security and safety.

### **2.3.6 Forces outside the home**

Forces outside their elderly' homes mainly affect their safety because their frailty makes them more vulnerable to injury or harm. Unfortunately, this is often not only due to invasion by external perpetrators, but also from persons inside the home. The vulnerability of frail elderly makes them a target for abuse by family members, care workers or strangers. Untrained family members, spouses and neighbours are often morally obliged or even forced to fill the caregiving gap and would often need to deliver both direct and indirect informal care. Rural communities' provision of frail care is often challenged due to lack of service access and formal, organised care providers (Buckwalter & Davis, 2011:33-46; Dharamshi, 2014:427; Frazão et al., 2014:20; Wiglesworth, Austin & Corona, 2009:1191).

It is therefore clear that, for the frail elderly to cope in their own homes, support from several areas will be needed.

## **2.4 SUPPORT FOR THE FRAIL ELDERLY**

Both personal assistance from family or carers, and technological assistance are necessary to reduce the severity of dependency for the frail elderly at home.

### **2.4.1 Family and community**

The frail elderly need supportive assistance to help them function more independently in their homes. This is mainly provided by family and community members. However, the effect of increasing frailty on the family members and community can become a huge obstacle due to the variety of challenges frail elderly face (Cohen-Mansfield & Frank, 2008:505; Lum et al., 2016:98). Personal assistance does not only imply physically care but can include doing grocery shopping; transportation; managing their medication; housekeeping, and / or socializing to prevent loneliness and social isolation from the community. For this reason, attending social activities in the community is very important, which places a strain on voluntary carers with limited personal time or resources.

Another problem is that the out-migration of adult children to urban areas for employment forces the frail elderly to depend on a diverse combination of informal community sources for care. This could include friends and neighbours. Most of these volunteers are not trained to care for frail, vulnerable elderly, which places a huge responsibility on them (Buckwalter & Davis, 2011:33-46; Khanal, Ra & Chalise, 2018:2; Sarnak & Burgers, 2015:1-2).

Using assistive devices as supportive resources can provide the elderly with more independence.

#### **2.4.2 Supportive resources equipment or assistive technology**

Additional equipment such as assistive technology is necessary to help the frail elderly to function more independently in their homes. This assistive technology can vary from assistive devices to consumables, and include wheelchairs, walking frames, adult incontinence nappies and other tools that allow better performance of daily activities. Using assistive devices has one objective, and that is to make the frail elderly as independent as possible (Mann, Ottenbacher & Fraas, 1999:210; Hoenig, Taylor & Sloan, 2003:330). The user must be able to move freely with them in and around the home. Furniture must be shifted to make way for walking frames and wheelchairs. The correct use of assistive devices, e.g. crutches or artificial limbs is pivotal, as the bruising of the skin caused by the untrained use of an assistive device may be seen as a form of physical abuse (Ćwirlej-Sozańska, Sozański & Wiśniowska-Szurlej, 2018:510; Lang et al., 2009:539).

A lack of support and loss of independence increases the vulnerability of the elderly.

### **2.4.3 Increased vulnerability**

Frailty causes a decline in the body's physiological systems, brought on by health changes that trigger coping stressors. The frail elderly become successively more dependent on family members and the community, leaving them more open to exploitation, either financial and / or physical (Clegg et al., 2013:752). The changing social and economic environment caused by modernisation and urbanisation has an eroding influence on the traditional social support which included respect for elderly, leading to elder neglect, exclusion from social groups and abuse. Norms, cultural values, and a deep-set belief that families must take care of their own problems and old people can also influence service delivery to the frail elderly who need assistance, but refuse to ask for, or to receive help (Buckwalter & Davis, 2011:41; Chen et al., 2014: 433). Aspects that further increase frail elderly' vulnerability to abuse include being single; living in a rural area; having no working children nearby, and children staying with an elder or an older couple. The phenomenon of elder abuse is becoming a universal concern (Bigala & Ayiga, 2014:463).

### **2.4.4 Predictors of abuse**

Elder abuse is defined by the World Health Organization (WHO) as *“a single or repeated act or lack of appropriate action within any relationship where there is expectation of trust, which causes harm or distress or is likely to cause harm or distress to an older person”* (WHO, 2008). Abuse takes on many forms. Ananias and Strydom (2014:270) list five types, including a) financial-; b) physical-; c) psychological-; d) sexual abuse, and e) neglect. This includes frail elderly being struck, sexually molested or physically restrained. While the frail elderly is exposed to all forms of abuse present in a population, financial abuse is very prevalent in South Africa, as pensioners are often the only persons with an income in a household. Financial abuse or economic misuse includes financial exploitation of a frail elder, such as stealing pension money; selling property without consent and / or changing a will. Literature indicates that while men are more prone to be physically abused than women, women are more often victims of emotional and financial

abuse. Alarming, sexual abuse is becoming more universally prevalent (Ananias & Strydom, 2014:270; Bigala & Ayiga, 2014:463).

Predictors for abuse lie not only in the abusers, but within the elderly as well.

#### **2.4.4.1 Risk factors for abuse within the frail elderly community**

Several factors make an elderly person an easy target for exploitation and abuse. Literature indicates that serious, chronic physical health problems and increasing disorientation and confusion of the frail elderly seem to be a pivotal reason for abuse. Frail elderly' deterioration in physical, psychological and cognitive functioning; as well as factors such as substance abuse; difficult behaviour; social isolation and loneliness can make them victims. Alternatively, cognitive disorders such as Alzheimer's disease and dementia may lead to violence towards caregivers, with reciprocal abuse and / or neglect (Buckwalter & Davis, 2011:39; Ananias & Strydom, 2014:271-273; Tshesebe & Strydom, 2016:1, 10). Uys and Middleton (2014:496) describe the profile of abusers and abuses as summarised in the following paragraphs.

#### **2.4.4.2 Being at risk for abuse**

Elderly persons at risk of abuse are often female; physically and / or cognitively impaired; experience behavioural problems that cause distress such as wandering; urine and stool incontinence; night-shouting or confusion. Another category includes any elder dependent on assistance; or those who are dependent yet maintain an autocratic role towards their adult children. The risk for abuse can be physical, sexual (rape), verbal, and / or financial, as mentioned.

#### **2.4.4.3 High-risk profile of abusers**

Research has shown that among persons who run the risk of becoming abusers, non- / poorly trained, or unwilling carers, and family members feature clearly. Most carers are the daughters or granddaughters of the frail elderly. If family members are



usually the main providers of informal care, elderly run an additional risk of being abused by one or more members of their own family (Ananias & Strydom, 2014:268). Literature indicates that abuse of the elderly is often due to factors such as poverty; minority status; the elder's functional disability and / or aggravated cognitive impairment; carers who misuse alcohol or substances, have poor communication skills, and experience personal or matrimonial conflict (Lachs, Williams & O'Brien, 1997:474; Uys & Middleton, 2014:496).

Familial abuse is not necessarily due to malice on the part of the carer, but can be caused by undue stress due to different factors. This can include the lack of skill and knowledge in untrained carers; the absence, inaccessibility or insufficiency of organised service programmes or follow-up; or where there is a lack of support for carers from the community itself (Buckwalter & Davis., 2011:41). Family members are vulnerable to the same stressors the frail elderly experience. All being said, Corbi, Grattagliano and Ivshina (2015:299), concur that most frail elder abuse is due to mistreatment by their family members.

As in all abuse cases, it is important to notify elder abuse to the authorities.

#### **2.4.4.4 Notification of cases of abuse**

Guideline 14 of the Older Persons Act (Act 3 of 2006) makes provision for notification of alleged elder abuse to the Director-General and DSD. The Department of Social Development is directed to keep a register of perpetrators who have abused the elderly. It appears that the number of reported cases of abuse of older persons has increased since August 2010 from 1887 in 2011/12 to 2497 in 2012/13, as seen in statistics from the Association for the aged (2016:1).

In Senekal, the South African Police Service (SAPS) had no cases of elder abuse reported in 2018 and 2019 by Constable Chapatso (2019). Senekal Court heard no elder abuse cases in 2019, and only one during 2018 indicated by Me. Moduka (2019). It seems that abuse of the elderly is not being reported in the Free State. A reason for this that was mentioned in a 2016 research study indicates that social

workers from the DSD had neglected their duties towards older persons, even though they understood their role in terms of service delivery to the elderly. They reported that child foster care cases consumed most of their time (Tshesebe & Strydom, 2016:5). However, some elder abuse cases were referred by the DSD's social workers from the area's residential care facilities for the aged.

## **2.5 RESIDENTIAL ELDER CARE VERSUS COMMUNITY CARE**

Residential care or community care? That is the question for many elderly persons. As discussed in Chapter 1, the number of frail elderly is rapidly accelerating worldwide. Universally, there are limited economical resources available and some subsidised community care facilities have been found to be inadequate due to lack of funds.

Each care option will be examined next.

### **2.5.1 Residential facilities**

Residential care facilities render 24 hour nursing care to the frail elderly. These facilities are registered with the DSD and the National Department of Health (NDOH) and must comply with the Older Persons Act (Act 13 of 2006).

The following advantages and disadvantages of frail elderly residential facilities are noted.

#### **2.5.1.1 Advantages of a residential facility**

In residential facilities, support services such as an inter-professional team are required to assist and sustain frail elderly, provided either by the Department of Health or private practices. Primary health care is available 24 hours per day, including regular monitoring of vital signs and continuous medication control. Socialization programmes and daily group therapy are available to the residents to

prevent loneliness and boredom. Ideally, specialised geriatric nursing treatment and care programs are available in a residential facility.

To remain part of the community, residential facilities have an important service provider role. Many run outreach programs from the residential facility, such as wound care; a borrowing depot for assistive devices; and providing help and support with different types of available specialised medical equipment when required (Older Persons Act, 2006:100-119).

### **2.5.1.2 Disadvantages of a residential facility**

Some frail elderly may feel isolated from their families and are lonely because of the rules and organisation in a residential facility. Family or community norms, as well as cultural values and beliefs may require that families take care of their own problems and look after their elderly themselves. This makes it difficult to change opinions on living in residential care facilities (Buckwalter & Davis, 2011:33), which may be a significant reason why communities have a negative view on residential facilities. Considering cases of elder abuse, it is shocking to find that abuse cases are also present in residential facilities. The old must often feel that there is no safe haven for frail elderly.

Residential facility care is a costly service and is therefore not the answer for the permanent long-term care of all communities' frail elderly (Froneman *et al.*, 2004:423; Hoedemakers *et al.*, 2019: 1). Looking at the current situation, the monthly social grant from the South Africa Social Service Agency (SASSA) does not cover the cost of residential care. There are often additional costs, such as disposing of adult incontinence nappies via commercial waste removal services that are not routinely included in the lodging fees for the frail elderly.

The noted advantages and disadvantages of residential care indicate that the only logical solution for affordable care for most of the frail elder population is community home care.

## **2.6 COMMUNITY CARE**

Lopez-Hartmann, Wens and Verhoeven (2012:1-2) concur that many governments are promoting initiatives to keep the frail elderly at home for longer. Comparing the advantages of community care to its disadvantages is quite interesting.

### **2.6.1 Advantages of community care**

The assumption in the broader community is often that frail elderly people belong at home and want to be cared for at home. In rural communities, family members, friends and neighbours are involved and often provide direct and indirect care to the socially isolated, frail and chronically ill elderly. The best, most logical solution for a growing frail elderly population, is for them to stay at home for as long as possible, if an adequate support system is in place (Buckwalter & Davis, 2011:33; Froneman et al., 2004:423; Lopez-Hartmann et al., 2012:1-2).

### **2.6.2 Disadvantages of community care**

The disadvantages include the limited organised, professional care services available in the community, which creates barriers for assisting the frail elderly. Caregivers experience difficulties in providing or finding on-going support for the frail elderly at home. The care they provide is relatively limited and there is no / poor assistance or support for the caregivers themselves. Limited community programmes lead to caregivers only seeking assistance when there is a crisis (Buckwalter & Davis, 2011:33).

Institutional care delivery is becoming increasingly less affordable, with hospital and institutionalized care decreasing due to the costs involved (Carpenter *et al.*, 2004:260; Hoedemakers et al., 2019:1). As the population keeps growing older, and institutional or residential care is not an economic solution for the majority of the frail elderly due to fear of alienation and loneliness; personal preference, and the almost unmanageable cost of chronic, incurable frailty, providing home-based community care is the logical alternative.

## **2.7 FRAIL CARE**

Frail care means care for elderly persons who cannot function independently and require daily assistance (Older Persons' Act, 2006:6). This type of care focuses on the individual's level of dependency and the physical support required. There are many theories on the treatment of the frail elderly, but one of the most important tasks is to prepare for the future challenges that caring for the frail elderly brings (Fried et al., 2004:255; Wallace & Shelkey, 2008:67-70; Shelkey & Wallace, 2012:2; Kreitzer, 2015:40). This care can be provided at an institution or at home.

## **2.8 HOME CARE**

Home care is sometimes also called home-based care and is defined as placement of informal and formal caregivers in a home to promote, restore and maintain the maximum level of comfort, functioning and health care to a frail elder or older person, [allowing them] to remain at home for as long as possible (Hoedemakers et al., 2019:1; Uys & Cameroon, 2003:22). Literature uses the concepts 'home care' and 'home-based care' interchangeably. For this study, the concept 'home care' will be used throughout.

Home care is defined as care that is provided to the frail elderly in their own homes. The aim of this is to improve the quality of life and the functional health condition of older persons. 'Home-based care', as described in the Older Persons Act (Act 13 of 2006), would ensure that frail elderly receive maximum care within the community through a comprehensive range of integrated services. As home care is the preferred option of many older persons, one must assess its advantages and whether this alternative is the better option for the elderly.

### **2.8.1 Advantages of home care**

As mentioned in Chapter 1, research has shown that most frail elderly prefer to stay in their own homes, to receive frail care there as well, and eventually to die at home

(Cohen-Mansfield & Frank, 2008:505). The most realistic option for this was community home care. As described, an advantage of home care is that the frail elderly is cared for in their familiar environment by formal or informal carers for as long as possible (Lopez-Hartmann et al., 2012:1). This allows long-term sustained, independent living in customary communities. Secondly, this aids the frail elderly to maintain maximum independence in their own home. Unfortunately, due to many frail elderly' dependency on 24-hour care, this desire can be difficult to maintain, which forces them to seek help.

Several studies mentioned that frail elderly who actually want to be cared for at home sometimes choose to spend their days in nursing homes (Lopez-Hartmann et al., 2012:2). The Canadian Health Care System has one of the most rapidly growing home care divisions in the world and recognises home care as an essential service to the frail elderly. This option is preferred, even if the frail elderly is facing limitations due to illness and / or disability (Carpenter et al., 2004:260; Hoedemakers et al., 2019:2). Lopez-Hartmann et al., (2012:2) note that services which aim to maintain the frail elderly at home for as long as possible must be developed and implemented, including health care and social services.

Sometimes the frail elderly needs a variety of services at home, including cleaning; 24 hour nursing care; day-care programmes; support group visits; and meals-on-wheels. The type of service depends on the individual needs of the frail at home and can differ greatly (Thomé, Dykes and Rahm Hallberg, 2003:865; Froneman et al., 2004:424; Lopez-Hartmann et al., 2012:1; Sarnak & Burgers, 2015:1-5).

Investigating universal financial implications and the more realistic option of implementing home care, the implementation of home care in the future is essential for successful caring of the elderly. Literature indicates that the problem in South Africa is that the system of home care is underdeveloped, even undeveloped (Froneman et al., 2004:424-425). Since 2004, not much has been done to establish realistic home care for the elderly, even though Government has had legislation in place since 2006, promoting home care or support to the frail elderly in the community as indicated in the Older Persons Act (Act 13 of 2006; DSD, 2019:1).

Without material and practical public support the older persons preference to be cared for at home, is not realistic.

## **2.9 SUPPORT**

As stated in 2.8.1, to make home care successful, effective support is necessary. This support can take on many formats, both social and material.

### **2.9.1 Social support**

Practical support such as social support for the frail elderly is necessary as they depend on others for care in their social surroundings. Currently, many frail elderly indicated a preference for communal care and support provided by, or expected from, spouses, extended family members or neighbours (Buckwalter & Davis, 2011:2). Most frail elderly strive to do care activities themselves, such as bathing; going to the toilet or dressing independently. Schröder-Butterfill and Fithry (2014:365) identify community structures as support and social networks that help the frail elderly at home. The HIV/AIDS pandemic has impacted a whole generation, with the result that many of the present frail elderly have no adult children to support them. This has had a direct influence on the financial, social and material substantiation of these frail elderly, forcing other relatives to step in to assist in the absence of the usual traditional carers. In fact, many frail elderly themselves have become primary caregivers to their orphaned grandchildren. The question of who must care and support whom has left elder-headed households even more vulnerable, increasing their social and economic dependency on other forms of assistance.

Hence, the much preferred home care is not realistic for elder-headed, or even single person elder households without material and practical support (Lombard & Kruger, 2009:124-125). Additionally, organizational support for carers and family members is currently not being provided either (Tshesebe & Strydom, 2016:7; Schröder-Butterfill & Fithry, 2014:361-365).

## **2.9.2 Support for carers and family members**

As discussed, the persons who care for the frail elderly are often family members and / or voluntary community members with no training. These are all people who need support and training to enable them to care for others (Lopes-Hartmann et al., 2012:2). Fear and ignorance in the face of problematic or inappropriate behaviour increases the possibility of elder abuse occurring (Corbi et al., 2015:298). These are all reasons why external support of caregivers is so important.

Literature indicates that extended family members are often reluctant to take responsibility of caring for the frail elder, while inadequate structures or unavailability of formal organizations affects service delivery in the communities. Added to this, the lack of guidance and social support from the DSD causes endless problems (Lombard & Kruger, 2009:130; Tshesebe & Strydom, 2016:11).

## **2.9.3 Material support**

Material support is critical to the frail elderly who depend on others for care and goods. This form of elder support includes indirect care such as transport assistance; domestic household aid; meal preparation and help with financial management. Many households rely on spouses or family members to support the frail elderly in these matters. Especially the frail elderly with lower levels of functional capacity face particular difficulties with transport to clinics and social activities. They often have to walk long distances, which increases their physical vulnerability (Hoedemakers; 2019: 2; Kelly, Mrengqwa & Geffen, 2019:2; Schröder-Butterfill & Fithry, 2014:361-365).

## **2.9.4 Human resource support**

Complex interventions, such as involving skilled caregivers to work in frail elderly home care, requires regular training and support for these carers, who could then be viewed as formal human resources expecting remuneration for service rendered



(Van Zyl, 2020). The question however, is whether the average frail elder would have the financial means to afford informal or formal caregivers.

Caregivers can get additional support from their extended families. Some caregivers may be unwilling and / or unable to look for assistance or encouragement due to the belief that care for their own frail elder(s) is a personal responsibility. Thus the carer won't receive what assistance or support is available when needed. Furthermore, family conflicts on the care of parent(s) are sometimes not discussed with authorized service providers as families do not trust them, or they are afraid that personal information will leak into the community. In cases where there is problematic behaviour due to mental health or social problems, a family might remain silent for fear of stigmatization by the community (Buckwalter & Davis, 2011:39-40).

## **2.9.5 Resources in the community**

The frail elderly is a part of a community, even if they are the silent partner. As described in Chapter One, the frail elderly in a community have three choices: To a) remain in their homes; b) accept community home care services; or c) be cared for in a frail care facility (Froneman et al., 2004:423). It is a fact that frail elderly are more and more dependent on ADL support, which includes socialization with family members or volunteers from the community (Morley, Vellas & Van Kan, 2013:392-396). Ageing; a decline in physical abilities; cognitive and psychological ill health, and a history of falls all impact on the increasing demand for community care (Dubuc, Dubois & Raïche, 2011:2; Hoedemakers et al., 2019:1). Local and international literature reflects the past 15 years' shortage of information or progress in community care programmes. Carpenter states that internationally, only a small amount of knowledge is shared regarding community care or effective home care programmes (Carpenter et al., 2004:260). This author also stated that the frail elderly must decide for themselves whether they prefer home care in their communities, and then choose who must look after and care for them themselves, as well. This decision can only be made if home care is available in the community. Due to financial constraints and problems with resources (DOH & DSD, 2015-2019) South

Africa currently cannot give formal or informal care to the frail elderly in their own communities.

### **2.9.6 Formal and informal care**

The frail elderly not only depend on caregivers for activities of daily living, but for formal and informal care as well. The carers will assist with activities such as personal care, dressing wounds or giving medication. They sometimes also support the frail elderly with socialisation activities or contact within the community, such as drawing a frail elder's money from the bank or buying groceries.

Formal health care activities are provided by organized health care and social services, while family members, friends and neighbours most often provide informal care to the frail elderly in rural communities (Buckwalter & Davis, 2011:33). This care can be a direct or indirect service to the frail and chronically ill. As Buckwalter and Davis (2011:33) state, these services are limited and can create care barriers for the frail elderly, e.g. procuring informal help will lessen the pressure for formal care delivery. Informal carers have trouble finding on-going support for themselves or their frail charges at home. Although caregivers' assistance is available to carers from the DSD, according to Buckwalter and Davis (2011:33) no assistance or support is provided to the informal sector. The researcher observed that caregivers often had no knowledge of existing community aid programmes and only sought assistance in times of crisis. The type of assistance they most often needed was in regard to nursing, but this posed a challenge as most nursing service providers were geographically too far away to help, especially in rural areas. This issue makes the delivery of nursing care very difficult in rural areas.

### **2.9.7 Nursing care**

The frail elderly has many specific nursing needs (Gray, Sarnak & Burgers, 2015:1). In an ideal world, they would receive good quality nursing care on primary care level in their own homes. Community health care is limited in South Africa and the demands for primary nursing care will probably increase as the numbers of the frail

elderly escalate (Kelly et al., 2019:1). Student nurses internationally describe elderly care as a less desirable career path.

In South Africa, the future does not look any better. Statistics from SANC, dated 4 January 2016, show that only one nurse in the speciality of geriatric nursing was registered in 2014, and none in 2015. According to SANC in 2019 there are 143439 registered nurses in South Africa (SANC, 2019:4-5). Of these there are only 240 nurses registered as having a qualification in geriatric nursing. It seems as if registered nurses are not interested in geriatric nursing.

### **2.9.8 Primary health care**

In South Africa, primary health care is the main source of nursing care for the frail elderly. However, this health care system is under severe pressure, and will have to develop new elder care approaches to meet the needs of more, older patients (Peltzer & Phaswana-Mafuya, 2012:1). The 2016 study by Looman et al., (2016:154) indicated that all primary health care systems encounter great challenges due to the world-wide increase in ageing populations. The challenge is that more and more of the frail elderly depend on public health care services, which are the key-role players in the delivery of this type of service. There is a universal and ever-increasing demand for primary care and health care services. The South African public health care system is characterised by long waiting times; negative staff attitudes; non-availability of prescribed medication; staff shortages, and a lack of health worker expertise in the management of chronic illnesses (Kreitzer, 2015:40; Kelly et al., 2019:2). These problems are the main reason for the increase in dissatisfaction with the health care service delivery by DOH, as indicated by its older clients (Peltzer & Phaswana-Mafuya, 2012:3).

Studies have shown that early identification of illness at primary care level helps with the choice of correct interventions and the effective treatment of chronic illnesses, which is cost-effective and improves the quality of life (Morley et al., 2013:392-394). Presently, this is more of a pipedream as local primary health care services are overcrowded and only offer basic primary care. Even though there is a policy move

towards community care, no programmes aimed at the frail elderly have been implemented at primary health care level. To the contrary, the frail elderly must compete with other patients for care.

This same trend is found in Matwabeng, which has only two primary health care clinics serving a population of 22 076 (Statistics South Africa, 2011).

At 70%, the majority of South Africans depend on the public health sector for their health care needs, while 23% attend private health care services and 0.1% visit traditional health practitioners (Peltzer & Phaswana-Mafuya, 2012:1). As the frail elderly are one of the more prominent users of primary care facilities, hospitalization and use of nursing homes, it seems strange that not many public health care professionals provide adequate care to them, and struggle to identify aspects of frailty and dementia. As seen from the SANC training statistics, primary health care workers often lack specialised skills for managing the specific needs of geriatric persons (Dharamshi, 2014:427-428; Janse, Huijsman & De Kuyper, 2016:1; Kelly et al., 2019:2; Morley et al., 2013:293-394).

As already stated there is a lack of home care. Although the legislation is in place it seems as if no effective programs have been implemented to match the increasing number of frail elderly. This has an overall impact on health care services.

## **2.10 IMPACT ON SERVICE RENDERING**

One of the greatest public challenges of ageing populations, is the increased economic, health- and social care demands made by the frail elderly. Their increasing economic plight leads to more applications for social grants from the frail elderly, which places a greater burden on the budget of the DSD. As indicated by the 2018 annual Statistical Summary of Social Grants utilized in South Africa, social grants are the main income of 80.98% of the elderly in the Free State (Malange, 2018).

## **2.11 CONSUMABLES**

Excluding direct health care, the frail elderly also presents with an increased level of utilization of consumable resources, such as products to manage urinary and faecal incontinence (Dowling-Castronoro & Spiro, 2018:1-2). Functional decline places a heavy financial burden on the primary health care service or elderly having to procure and stock appropriate supplies, such as geriatric incontinence products (adult nappies, pads and urinary catheters). This is a normal ageing problem for most of the frail elderly, but they often avoid talking about it as these impacts on the personal dignity of the afflicted individuals. Most of the mentioned products are not available in clinics at primary care level and the frail elderly or their families have to buy most of these products themselves (Van Zyl, 2020).

When considering the general or specific needs of the frail elderly, one should first explore what frailty means. Frailty can be measured to determine the dependency levels of the frail elderly in the community.

## **2.12 MEASURING FRAILITY**

The first step to identify the needs of the frail elderly is to determine who the frail elderly was. The best sources for this information were the frail elderly themselves. According to two ADL scales consulted for this study, the main needs to be assessed would include dependency with regard to mobility; dressing; eating, and toileting. Dependency can mean being able to complete self-care tasks under supervision; with direction; needing personal assistance or requiring total care. On the other hand, independence requires no supervision, direction or personal assistance (Shelkey & Wallace, 2012:2).

A large variety of approaches and methods to assess and evaluate elderly persons are available, and different assessment instruments are used in nursing to measure physical frailty and dependency. These include the:

- a) Katz ADL is an instrument to assess the level of independence in older adults or dependency in frail elderly. The functional status of a frail elder's

ability to perform ADLs independently or dependently is measured (Wallace & Shelkey, 2008:68; Shelkey & Wallace, 2012:2)

- b) The Lawton IADL scale, which focuses on more complex activities necessary for functioning in a community setting. These higher functions are usually lost before the more basic activities of daily living (Graf, 2008:56)
- c) Norton Scale used to assess the likelihood of adult patients developing pressure ulcers (Norton & McLaren, 1962). This scale is mostly used to assess the frail elder on admission to a hospital or other facility, and to evaluate their risk for pressure ulcers on a continuous basis in residential facilities
- d) Urinary Incontinence Assessment in Older Adults Scale, measuring the level of urinary incontinence (Dowling-Castronoro & Spiro, 2018:2)
- e) Glasgow Coma Scale (GCS), a neurological scale that provides a reliable and objective way of recording the state of a person's consciousness (Teasdale & Jennett, 1974).

There are several scales that focus on the cognitive abilities of the frail elderly as well. These assist the nurse in identifying the presence of elderly dementia. Assessments scales for persons with dementia have been developed for use in research and to assess the levels of care for dementia patients. The scales screen for cognitive impairment and thus help to diagnose dementia (Vermeulen & Neyens, 2011:1; Sheehan, 2012:349).

In keeping with the concept, frailty is linked to the ability to perform ADL.

### **2.12.1 Activities of Daily Living assessment instruments**

The activities of daily living are essential activities that an elder need to perform to be able to live independently. Frail elderly has a higher risk for ADL disabilities that makes them dependent and sometimes in need of frail care (Wallace & Shelkey, 2008:68; Vermeulen & Neyens, 2011:1).

For the sake of this study, appropriate activities of daily living were assessed by using a combination of the Katz ADL (Addendum A) and The Lawton IADL scale (Addendum B). The Katz ADL focuses on six personal daily activities, namely a) bathing; b) dressing; c) toileting; d) transferring; e) continence, and f) feeding (Wallace & Shelkey, 2008:68; Shelkey & Wallace, 2012:2). On the other hand, The Lawton IADL scale is concerned with eight functional levels: a) Ability to use a telephone; b) shopping; c) food preparation; d) housekeeping; e) laundry; f) mode of transportation; g) responsibility for own medications, and h) ability to handle finances. These tasks represent functional levels of living in a community setting (Graf, 2008:56).

Where the Katz ADL did not assess all the types of functioning required for this study, selected activities to determine the dependency of the participants were taken from The Lawton IADL scale. The main focus is on activities completed at home, in a community setting. A combined scale consisting of appropriate ADL was compiled for the study and then translated to Afrikaans and Sesotho (Addendum E).

The new assessment instrument comprises of 10 ADL to identify dependency at home-based on the following functions: a) Personal hygiene; b) toileting; c) dressing; d) transferring; e) continence; f) nutrition / feeding; g) medication control; h) shopping; i) mobility (walking); and j) preparing / cooking own meals. The adapted scale offers only two responses, namely 'Yes' or 'No'. Interpretation of the answers entails that 'Yes' means that the participant can do the ADL and is independent, or 'No', the participant cannot do the ADL and is considered depended and in need of help. If the person answered "No" to two or more questions, they were categorised as frail, dependent and in need of care.

The aim of the adopted assessment instrument was only to identify the frail elderly in Matwabeng that answered "No" more than once in Part One of the questionnaire, so that only applicable frail elder persons were included in the study.

After studying nursing theories on the self-care of the frail elderly, the researcher chose the Deficit Theory of Orem as being the most appropriate for the study.

## 2.13 SELF-CARE DEFICIT THEORY

Orem observed which needs for care developed when an elderly person weakened and a decision must be made whether or not to appoint a carer for him / her (Alligood, 2014:244; Ali, 2018:1). The theory's researcher defined self-care as the practice of activities that maintain life, functioning, personal development and well-being in a time frame compliant with a functional and developmental ruling (Alligood, 2014:244). She further identified three nursing science practices used in self-care, namely a) total nursing care; b) partial nursing care; and c) supportive nursing care.

This theory highlights the fact that some frail elderly need total nursing care or help at home, but everything must be done for them, while others may only need some measure of help, or support with specific activities of daily living (Alligood, 2014:241-243). In another study, Ali (2018:1) referred to challenges such as stressors which induce a total lack of self-care, with dependency on a caregiver, while basic to supportive care is provided by a trained nurse who plays a major role in caregiving and supervision.

The self-care deficit theory comprises of the following tenets:

- a) Self-care evaluation that reflects on how and why frail elderly care for themselves at home in the community. This includes the self-care activities that frail elderly can accomplish on their own, indicating that no additional help or support is required (Alligood, 2014:244).
- b) Socially dependent frail elderly, including those who depend on family members and / or friends to physically assist them. This care includes support and protection due to the inability to complete self-care at home or being only partially able to engage in self-care attempts (Alligood, 2014:244). In the study by Ali (2018:1), this is explained as the nurse playing a major role in the elder's care, as the person is totally dependent on the caregiver.
- c) Self-care shortfalls, including performing some self-care activities; a limitation by the elder to do self-care; and to assist the frail elderly in all their needs (Alligood, 2014:244).



- d) Interpersonal relationships must be maintained to ensure continuous nursing care for the frail elderly. This means that the frail elder must accept the care and assistance given by the carer and maintain a good relationship with the carer(s) (Alligood, 2014:244).

Orem mentions that some basic conditions have an effect on the self-care demands of individuals at a particular time or under specific circumstances, including the person's age; gender; developmental level; health status; pattern of living; health care system; family members; socio-cultural factors; the availability of resources and external environmental factors (Alligood, 2014:247).

Goals for frail elder care are being set globally. These goals can only be met through assisted self-care or dependent care to enable optimal human functioning. Orem describes them as the intake and maintenance of sufficient air; sufficient ingestion of food and water; provision of care; maintenance of the balance between activity and rest; social interaction; improvement in well-being; prevention of injury to human life; and promoting socialisation and human functioning (Alligood, 2014:245). This forms part of any frail elder's desire to be viewed as normal and treated with respect. Life's situations; preventing the development of complications and overcoming illness or complications could all decrease frail elderly' faculty for self-care (Alligood, 2014:245). Ali (2018:1) added that it is important for an elderly person to accept reality and take responsibility for their own health situation.

To address any self-care deficit in Matwabeng would need information, e.g. knowing what the care needs are of the frail elderly there.

## **2.14 MATWABENG**

The Setsoto Municipality consists of Matwabeng, Senekal, Marquard, Ficksburg and Clocolaan. Matwabeng is one of the rural townships of Senekal in the Thabo Mofutsanyane Local District Municipality of the Free State province. The same trend of a rapidly growing elderly population is also found in the community in Matwabeng. In 2011 the Free State's elderly population ( $\geq 60$  years) numbered 228 789, which

increased to 245 639 by 2016. This is an increase of 7.4% in elder people over five years. The census of 2011 (Statistics South Africa, 2011) calculated a population of 22 076 persons in Matwabeng, residing in 6 458 households. The most spoken language in Matwabeng is Sesotho (94.9%), followed by Afrikaans (1.6%), while only 0.60% of the residents speak English and other languages (2.9%).

Matwabeng lies within walking distance from Senekal, the nearest town where residents can do their shopping and source personal needs. To get to town to do business, the frail elderly must use taxis, be transported by their children or use their own personal vehicles. Not many frail elderly have their own transport. Currently, the DSD transfers the monthly social grant (for those frail elderly who receive it), into a SASSA (South African Social Security Agency) debit account. The funds can be drawn at any automated teller machine (ATM). After working with frail elderly for the past 28 years, the researcher has noted that most of the frail elderly cannot draw their own grant money from an ATM. They need help and assistance from their grandchildren, adult children, volunteers or the bank personnel.

To illustrate the problem: According to the 2018 annual Statistical Summary of Social Grants in South Africa (Malange, 2018), the main income for most of the elderly in the Free State (80.98%) is social grants. It is important to look at the financial situation of the frail elderly and what the average monthly income of the frail elderly in Matwabeng was.

Currently, there is a residential facility for frail elderly in Senekal. It can accommodate 72 persons. Only 34 beds are subsidised by the DSD. A new, innovative plan is therefore required to accommodate the frail elderly in Matwabeng who require care but have no money. Home care in the community is the only viable alternative to accommodate the growing population of the frail elderly, who will continue to place a great burden on various formal and informal care resources in Matwabeng. Literature, as mentioned before, confirms that the frail elderly prefer to stay home, and will *have* to stay at home, as there are no other resources available to them (Cohen-Mansfield & Frank, 2008:505).

To render proper service to these people, we need to know what their needs are, and to determine the exact circumstances that need to be changed to improve the existing community services and infrastructure for the frail elderly in Matwabeng. To highlight this problem further, there are no statistics available regarding the frail elderly population in Matwabeng.

This emphasizes the importance of this study, and also seems to prove that the frail elderly are being neglected and forgotten by the public health care sector.

## **2.15 SUMMARY**

Chapter 2 gave an overview on the literature pertaining to the topic. In this literature the problem regarding the lack of knowledge on the care needs of the frail elderly living at home was highlighted. In preparation for the methodology an overview of existing evaluation methods of measuring the frail elderly was discussed. Contextualised the study and provided the reader with the background, highlighting the care needs of the elderly living at home. The chapter also presented the research question, aim and objectives of the study, and problem statement. For the research methodology, a deductive approach within a positivism paradigm was selected. Data was collected using self-administered questionnaires, followed by quantitative descriptive data analysis. A discussion of ethics was also provided, and the chapter concluded with the delineation, contribution of the research, definition of terms, and chapter overview.

The next chapter will discuss the methodology used to complete the study.

# **CHAPTER 3**

## ***Research Methodology***

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### **3.1 INTRODUCTION**

Chapter 3 offers an overview of the research methodology used in this study. This chapter describes the practical implementation of the research process and discusses the design and technique used to achieve the research goal. The population used, namely the frail elderly living in homes in Matwabeng, is also described, including sample size, the inclusion and exclusion criteria, and how the data collection was done.

The methodology is the plan of action to collect data; it guides the research and the ways of looking at reality. Effectively, it is a short plan of action or a planned investigation that the researcher is going to use (Kivunja & Kuyini, 2017:28). In Chapter 2, the researcher identified an information gap regarding the care needs of the frail elderly in the literature.

In research, it is important to adhere to the guidelines of the selected research design to ensure the validity and reliability of the outcome (Huck, 2012:68).

### **3.2 RESEARCH DESIGN**

The research design is a blueprint on how the study will be carried out it is a detailed plan which gives the researcher control over the process (Brink et al., 2018: 82; Polit & Beck, 2017:56). In fact, the research design is a complete plan of the entire research project and the outline of what the researcher wants to do. The framework of this blueprint helps to investigate the problem, without leaving out details or steps (Brink et al., 2018: 82; Polit & Beck, 2017:56). The value of researched data should be enhanced by a research design, which facilitates its aim and objectives. This

includes identifying the data collecting techniques and the exact process of recording the data.

In this study, a quantitative cross-sectional descriptive design was used to determine the care needs of the frail elderly living in homes in Matwabeng.

### **3.2.1 Quantitative research**

A research design is often classified as either quantitative or qualitative (Brink et al., 2018: 59,162; Polit & Beck, 2017:11,741). Quantitative research is defined as a systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical or computational techniques on the results. In short, it relies on numerical data to test the relationship between the variables. Therefore, measuring instruments are often developed and implemented using a quantitative design (Gray et al., 2017:188; Grove & Gray, 2018:35,54; Polit & Beck, 2017:11). For the sake of this study, quantitative data was used to quantify the care needs of the frail elderly.

There are four different quantitative designs that are normally applied in research, namely a) experimental, b) quasi-experimental, c) retrospective and d) non-experimental designs. In short, they differ in methodology and outcomes, as is described next.

- a) **Experimental:** Experimental design means the planning of a set of procedures to investigate a relationship between two or more variables. To design a controlled experiment, one needs a testable hypothesis. For example, it requires the randomization of participants into an experimental and a control group; precise manipulation of at least one independent variable and exact measurement of one dependent variable (Grove & Gray, 2018:56; Polit & Beck, 2017:193).
- b) **Quasi-experimental:** Quasi-experimental research involves the manipulation of an independent variable without the random assignment of any

participants to variable conditions or levels of conditioning. Among the more important applications of this design are non-equivalent group designs, pre-test / post-test designs, and interrupted time-series designs. The purpose of this design is to examine and explore any relationship between different variables. Compared to the experimental design, the controls of the variables of this design are not as strict and rigid. Limited controls are developed that provide alternative means to examine relationship in any situation not contributing to observable controls (Grove & Gray, 2018:56; Gray et al., 2017:456; Polit & Beck, 2017:197).

- c) Retrospective: This design works for data that has already been collected for another purpose, including nursing notes, emergency room reports and other clinical or administrative data (Brink et al., 2018:9,98)
- d) Non-experimental design: In this design, the researcher relies on observation, interpretation or interaction to come to a conclusion if he / she cannot control or manipulate the variables or subjects being researched (Brink et al., 2018:9,87; Polit & Beck, 2017: 52,203). For the sake of the present study, a nonexperimental design was used to explore the specific care needs of home-based frail elderly.

### **3.2.2 Explorative designs**

Exploratory research is conducted to gain new insights and increase knowledge of a phenomenon, so as to become more familiar with the nature of the data. The aim of exploratory research is to obtain deeper insight, and to identify concepts and stakeholders relevant to the study. This design is used when there is very little known about the topic (Brink et al., 2018:112; Polit & Beck, 2017:585).

As previously discussed, there is little information available on the needs of the frail elderly in South Africa, and even more so in Matwabeng. Due to this dearth of information an explorative design was necessary to dig deeper. The data collected

was examined descriptively because we do not know what the factual needs of the frail elderly are, and this requires further analysis.

### **3.2.3 Descriptive designs**

A descriptive design describes what really exists and is used to identify the phenomenon of interest; to name the variables; to develop an abstract and functional definition of the explored variables, and finally also to describe the variables (Brink et al., 2018: 96,112; Polit & Beck, 2017:206). Brink et al. (2018:96) confirms that a descriptive design is used when little is known about a topic. The aim of descriptive exploratory research is to obtain a new and clear concept of the portrayal that can be studied, including an accurate account of the characteristics of a particular group or participant in the study (Brink et al., 2018: 96,112; Polit & Beck, 2017:206).

There are advantages and disadvantages in descriptive design one must take into consideration when using this type of design. An advantage of using a descriptive design is that it takes less time to conduct a study and is relatively inexpensive. The main disadvantage of using a descriptive design is that the level of information obtained may be superficial. Descriptive and explorative designs do not indicate any relationships between the relevant phenomena being studied, but do provide the knowledge base for further correlational studies (Kivunja & Kuyini, 2017:26). The descriptive design utilized in this study, was used to describe those care needs of the frail elderly that were previous unknown.

Especially when studying what is unknown, research should be guided by a paradigm.

## **3.3 PARADIGM**

Every research project is guided by a paradigm: A set of beliefs or values that guides the research, is shared by researchers and regulates all inquiry (Cohen et al., 2018:8; Polit & Beck, 2017:9). These beliefs and values guide the decisions one makes in the research proses. Paradigms are also defined as research traditions

and views of the world; mind-sets, or the specific manner in which researchers study the phenomena relevant to their field of interest. It is a philosophical way of thinking. In short, paradigm means pattern (Brink et al., 2018:19; Kivunja & Kuyini, 2017:26).

A research paradigm consists of three components or elements, namely a) ontology; b) epistemology and c) methodology. These approaches aid to conceptualize and conduct research and contribute to the knowledge constructions developed. The researcher made a series of decisions guided by her beliefs and values that direct the decisions made in the study. Every paradigm possesses its own ontological and epistemological assumptions (Brink et al., 2018:19; Kivunja & Kuyini, 2017:26).

Ontology is an important aspect of a research paradigm.

### **3.3.1 Ontology**

Ontology is defined as the assumptions needed in order to make us believe that something makes sense or is real (Brink et al., 2018:19; Kivunja & Kuyini, 2017:26). While ontology questions are defined as what the nature of reality is and how things actually are, or how they work, researchers must position themselves with care in regard to their perceptions of reality. In ontology, the researcher believes in an objective reality that can be understood, explained and interpreted. Ontology is what we think reality looks like and how the researcher views the participants in a study (Kivunja & Kuyini, 2017:27; Perera, 2018:1; Polit & Beck, 2017:10).

Ontology is the question of whether one could measure the care needs of the frail elderly. While ontology relates to the nature of reality, epistemology is concerned with knowledge.



### **3.3.2 Epistemology**

Epistemology regards the nature and form of knowledge, focusing on the structure or the 'how' you know of something. It indicates how knowledge can be created, acquired and communicated, or what it means to 'know' (Kivunja & Kuyini, 2017:27; Polit & Beck, 2017:10). The focus is on the structure or format of knowledge, rather than the content, and deals with how we can explain phenomena. The knowledge or evidence represents the social reality that is being investigated (Botma et al., 2010:40; Scotland, 2012:9). Literature indicates that there are various paradigms with different ontological and epistemological views, and that these assumptions would reflect in the methodology and methods of a study (Brink et al., 2018:19; Scotland, 2012:9).

In the present study, epistemology is basically the quantified data collected re the care needs of the home-based frail elderly in Matwabeng. Different approaches have been followed to conduct research and to solve identified problems, including positivism, interpretivism, critical theory, constructivism and pragmatism.

The researcher chose to use the positivist approach for this study.

### **3.3.3 Positivist approach**

A Positivist paradigm is logical positivism based on a scientific approach with rules of logic, using measurement, truth, principle and prediction. The reality can be objectively studied in a quantitative manner (Cohen et al., 2018:10; Kivunja & Kuyini, 2017:30; Polit & Beck, 2017: 9,739). This research is a positivistic, systematic study that includes facts collected through standardized procedures. The study's positivist approach was aimed at the specific needs of the frail elderly to be quantified. A set of identified needs of the frail elderly living in Matwabeng were investigated in the study by answering questions.

### **3.3.4 Methodology**

Methodology is the plan of action the researcher will follow to collect the data. It pertains to the rules and procedures that specify how the researcher plans to investigate or study what must be known, including methods to follow to answer questions such as why, what, from where, when and how data is collected and analysed (Choy, 2014:99; Kivunja & Kuyini, 2017:28).

In this study, a positivistic research approach and deductive reasoning was used. The researcher chose a quantitative exploratory research design, comprising of a survey based on a questionnaire, followed by statistical analysis to determine the care needs. The questionnaire consisted of two parts: Part one aims to determine the qualities of the home-based frail elderly, collecting their biographical data and evaluating whether a person qualifies as a frail elder. Part Two specifically assesses the needs of the frail elderly.

### **3.3.5 Questionnaires**

A questionnaire is defined as a printed form to gather information that can be obtained through the written responses of participants (Brink et al., 2018:138; Grove & Gray, 2018:355). Polit and Beck (2017:243) describes a questionnaire as an instrument developed with open and closed questions or statements that can be asked or read to participants to guide their answers or reactions.

Before using questionnaires, one must consider the general advantages and disadvantages of this method of data collection.

#### **3.3.5.1 Advantages of questionnaires**

The aim of a questionnaire is to collect and explore relevant data. The advantages of a questionnaire include:

- Being able to collect a large volume of data from the participants in a reasonably short period of time

- The relative low cost and ease of use
- Allowing participants anonymous completion
- Enabling freedom to respond to sensitive issues.

Using a survey research design with questionnaires for this study was viewed as a quick and effective way for the researcher to reach the frail elderly in their homes.

### **3.3.5.2 Disadvantages of questionnaires**

Assessing the disadvantages of using questionnaires is important before deciding to utilize this method. One disadvantage of a questionnaire is its fixed format, which prevents any in-depth discussion of a more informal nature. Should a participant make a mistake, there is no way of picking it up, or determining whether the questionnaire was fully understood (Polit & Beck, 2017:243). Participants often do not answer or understand all the questions, and their responses may be inappropriate. Written questionnaires could possibly exclude those who are illiterate or cannot read. Participants' literacy levels must be known beforehand, so that selection bias does not disrupt the data collection process (Brink et al., 2018:139).

Despite any possible disadvantages, the researcher chose to keep using the questionnaire as a quick and effective way to reach the frail elderly in their homes. To ensure that illiteracy or physical problems such as weakness or poor sight do not delay data collection, the researcher decided to engage the field workers to aid people who, for whatever reason, were unable to complete the questionnaires by themselves. It was therefore important that the field workers were well trained prior to data collection regarding assisting the frail elderly that was unable to complete the questionnaire on their own. During the training of the field workers, the researcher ensured that they understood the questionnaire, were able to help the frail elderly complete the consent forms, and were able to use participants' preferred language in the process. This training was important as these were important factors that could impact on validity and reliability of the study.

### **3.4 DEVELOPMENT OF THE QUESTIONNAIRE**

The questionnaire consists of two parts: Part One (Addendum E) aims to collect biographical data and determines whether a person would qualify as a frail elder. To assess the specific care needs of the identified frail elderly, Part Two of the questionnaire (Addendum F) was developed.

#### **3.4.1 Development of Part One of the questionnaire**

Part One of the questionnaire, aimed at finding frail elderly in the community, but also helps to achieve the first objective of this study, as mentioned in Chapter 1: Calculating the number of frail elderly living in homes in Matwabeng. Part One was compiled by combining biographical data with parts of the Katz ADL (Addendum A) and The Lawton IADL scale (Addendum B). As explained in Chapter 2, these scales are widely used in concluding the level of frailty in the elderly. The elderly' functional status was measured using their ability to perform ADLs independently (Wallace & Shelkey, 2008:68; Graf, 2008:56; Shelkey & Wallace, 2012:2). The activities selected from The Lawton IADL scale for this study focused on the more complex activities necessary for independent functioning in a community setting, such as food preparation, housekeeping and self-medication. These higher level functions are lost before the more basic "activities of daily living" (Graf, 2008:56), e.g. ability to use telephone, food preparation and housekeeping. Determining whether a participant qualified as a frail elder was essential in order to only collect data from suitable persons. To establish this, participants had to answer "No" to more than two of the ten questions in this part of the questionnaire.

Part Two of the questionnaire was subsequently developed to assess the exact care needs of the frail elderly.

### **3.4.2 Development of Part Two of the questionnaire**

Part Two of the questionnaire was developed from data obtained from literature, as well as from sections of The Lawton IADL scale (Graf, 2008:56). The UFS library assisted the researcher in obtaining literature on the frail elderly using a search string with the inclusion criteria of the study. This extracted information and evidence from relevant studies regarding the frail elderly, on which questions for the questionnaire could be based.

Part Two of the questionnaire (Addendum F) only assesses the care needs of the frail elderly. This consists of aspects of general information about a frail person's daily activities and functioning; exploration of personal needs at home; nutritional status; safety at home; use of assistive devices, and the elder's financial management ability. This information also assisted the researcher in achieving the second objective, stated in Chapter 1: To determine the exact physical and socioeconomic health care needs of the frail elderly living at home in Matwabeng.

## **3.5 POPULATION AND SAMPLING**

Definition of a study's population and sampling method are very important because it has an effect on the validity and reliability of the study. This is crucial if the data is to be generalised (Gray et al., 2017:124; Polit & Beck:2017: 739,743).

### **3.5.1 Population**

The population of a study includes all the individuals who possess specific characteristics or meet the sample or set criteria for inclusion. This indicates the cases in which the researcher is interested in. There are different types of populations, namely: a) targeted, b) available or c) accessible.

- a) A targeted population is a group of people that meets the sampling criteria
- b) Available populations are selected by a conceptualised framework to find the best combination from a pool of available populations that qualify

- c) An accessible population is defined as a part of the targeted population to which the researcher has reasonable access (Grove & Gray, 2018:293; Polit & Beck, 2017: 56,249):

In nursing research, populations need not be limited to humans only, but can consist of different items such as documents and laboratory results (Brink et al., 2018:116).

The targeted population for this study is the frail elderly living at home in Matwabeng. The population of a study depends on the problem to be studied. Only limited, unreliable statistics on the frail elderly was available in Matwabeng Hence, the researcher had to use the available data and statistics as a guide to determine the population and sample size for this study.

Setsoto municipality has a total of 117 632 residences, while the elderly (60 years and older) account for a total of 9 875 persons (Statistics South Africa, 2016b). The only statistics that was currently available for Setsoto were the combined 2016 statistics, when the estimated percentage of elderly was indicated as 8.3% of the population. Thus, the researcher used this percentage to calculate the number of targeted frail elderly, estimating that the total number of frail elderly in Setsoto was 819. As the Setsoto municipal district comprises of four towns, this decreased the number of estimated frail elderly persons to 205 per town.

As in all research, one cannot use the whole population due to the number of individuals represented, so a smaller group must be selected. Identifying the smaller group is called sampling.

### **3.5.2 Sampling**

Sampling is defined as the final number of qualifying participants drawn from a population of interest, with the aim of understanding the larger population. The sample is therefore representative of the population, in order to generalise the study findings (Choy, 2014:99; Cohen et al., 2018:202; Grove & Gray, 2018:59).

Different sampling methods that could have been used include nonprobability, Probability and systematic random sampling.

### **3.5.2.1 Nonprobability sampling**

In this sampling method, not all members of the population have an equal opportunity (probability) of selection to the sample such as the following mentioned sampling methods; convenience sampling, quota sampling, purposive sampling and network sampling (Grove & Gray, 2018:310; Cohen et al., 2018:217). The mentioned sampling method is not ideal as this can cause bias in sampling.

### **3.5.2.2 Probability sampling**

Probability sampling is a random sampling technique where each member of the population has an equal chance to be selected for the sample. Sampling can be done using one of the following methods: Stratified random sampling, cluster sampling or systematic sampling (Brink et al. 2018:119; Choy, 2014:99; Cohen et al., 2018:214).

For this study, systematic random sampling was used.

#### **3.5.2.2.1 Systematic random sampling**

In quantitative research it is required that a representative sample be drawn from the population for the study. The sample must be selected appropriately to ensure that the findings can be generalised to the larger population not sampled. In order to draw a representative sample for a quantitative study, a list of all the participants in the particular population is needed, called a sampling frame (Du Plooy-Cilliers et al., 2014:135; Grove & Gray, 2018:308; Polit & Beck, 2017: 255,257).

To develop a sampling frame for this study, the researcher used a map of all the houses in Matwabeng received from the local municipal housing sector in Senekal.

Starting points were selected on the map for Matwabeng, from which systematic random sampling was conducted: An UFS biostatistician used length and breadth dimensions of the map (500 mm x 700 mm) to identify twelve random points, reducing possible sampling bias. The biostatistician selected a further six random length and breadth distances and indicated starting points where the two points intersected (Figure 1.1). For this study, the researcher aimed to sample 100 home-based frail elderly from the population in the Matwabeng. The sampling was done using Part One of the questionnaire, collecting and analysing the biographical data to immediately assess whether the interviewed person qualified as a frail elder.

Different sampling methods that could have been used include nonprobability, probability and systematic random sampling.

The next step was to conduct the pilot study.

### **3.6 PILOT STUDY**

A pilot study is defined as a proposed study on a smaller number of persons with characteristics similar to those of the targeted population. A pilot study is often an integral part of a complicated study (Brink et al., 2018:161; Pilot & Beck, 2017:177,739). The purposes of a pilot study is to refine the methodology and the data collection process, to test if the intervention is feasible, and whether the study is effectively based on the preliminary data (Brink et al., 2018:45).

The main aims of a pilot study is to aid and orientate researchers on the project; collect preliminary data, and evaluate whether appropriate, accurate information will be obtained (Gray et al. 2017:127). A pilot study is also referred to as a feasibility study, always using the same formulation of the research problem, planning and investigation as in the main study (Gray et al., 2017:127).

The pilot study for this research process was done specifically to assess the implementation of the questionnaire - as an important first test before going out into the community. As mentioned, it was applied to the elderly in the Ithuseng Luncheon Club in Matwabeng (Addendum C). The Club in Matwabeng aims to keep the elderly



mobile and active in the community for as long as possible, and is registered with the DSD to receive a monthly public subsidy. They meet three times a week on Mondays, Wednesdays and Fridays. Although the club elderly are not frail, they do have insight into the lives of the frail elderly in their community. The data collected during the pilot study was therefore not included in the final data.

Six elderly from Ithuseng Luncheon Club were selected as the target sample for the pilot study. They presented with some similar characteristics as the frail elderly from Matwabeng: Some of them resided in Matwabeng; all of them had chronic disease(s); some of them visit the local primary health care clinic; and some of them use assistive devices, such as walking frames.

The local pilot study was aimed at determining

- a) Whether the questionnaire was formulated clearly enough
- b.) How long it took to complete the questionnaire
- c) Give the fieldworkers experience in applying the set of questionnaires.

The results from the pilot study indicated that the questionnaires were comprehensible and took about 30 minutes to complete. The fieldworkers gained confidence in their ability to apply and complete the questionnaire. These results proved the validity and reliability of the study design, even though the participants were not deemed frail elderly themselves.

After the pilot study was completed, data collection began.

### **3.7 DATA COLLECTION**

Data collection is defined as a precise collection of the relevant information for the research study's specific objectives, questions and hypotheses (Choy, 2014:102; Grove & Gray, 2018: 70,361). The data collection for this study was done using structured interviews based on the two-part questionnaires previously described.

Structured interviews were used for two reasons. Firstly, the literacy level of the prospective respondents is unknown. Secondly, frail elderly might have physical impairments that make completing a questionnaire on their own problematic, e.g. eye problems.

To ensure consistency, field workers helped with the structured interviews.

### **3.8 FIELD WORKERS**

A field worker is defined as a person who does research to study the real world (Oxford Advanced Learner's Dictionary, 2019). Due to the fact that structured interviews were to be applied, the researcher included three field workers to help the participants complete the questionnaire. The field workers signed a confidentiality agreement (Addendum M) as part of the professional code and conduct for doing research. The field workers were trained to provide home-based care in their own residential community, and were already conducting different outreaches from the residential retirement facility in Senekal. They are known to their community as Home-Based Carers. All three the field workers understand and speak Afrikaans, English and Sesotho, and could therefore conduct the questionnaires in the preferred language of the frail elderly. Obstacles such as illiteracy or physical challenges preventing self-completion of the questionnaires were thus eliminated. Information was supplied to the frail elderly verbatim and a written patient information sheet was provided as well (Addendum G).

The researcher, as manager of the residential facility in Senekal for the past 28 years, trained all the field workers. This training consisted of: approaching prospective respondents; obtaining the necessary informed consent; identifying frail elderly and completing the questionnaire. The fieldworkers were supported and guided when necessary, while they were busy with data collection in the community. Training commenced in the boardroom of the residential facility with a discussion of the two-part questionnaire. The field workers each had to physically complete the two-part questionnaire to understand it. Thereafter, their confidentiality agreements (Addendum M) were discussed and signed. The fieldworkers were provided with the following documents namely; consent forms (Addendum D) and information sheet and the two-part questionnaire (Addendum E and F).

### **3.9 PROCEDURE OF DATA COLLECTION**

After the training and completion of the pilot study, the field workers started the Matwabeng community's data collection by doing a door-to-door home search to identify the frail elderly. Door-to-door is defined as visiting all the houses in an area to publicise something or for a specific reason (Oxford Advanced Learner's Dictionary, 2019). The field workers worked from each starting point as indicated by the biostatistician, walking clockwise around each block of houses in Matwabeng. The researcher's intention was to sample 50% of the estimated frail elderly living at home in Matwabeng, namely 100 participants. They knocked on the door of a house and asked whether any elderly lived in the home. If so, they introduced themselves to the elder and made sure that the person was 60 years of age, or older. The field workers then explained the purpose of their visit and inquired whether the elderly were willing to answer questions. If the elderly would agree, the information leaflets (Addendum G) were provided and discussed, before written consent was obtained (Addendum D). The questionnaire was then completed.

The field workers visited a total of 2 505 houses, and identified 235 elderly persons, of whom 100 were frail elderly, which was identified by completing the part one of the questionnaire.

### **3.9.1 Reflection on challenges encountered during data collection**

Keeping the mentioned ethical principles of respect and confidentiality in mind (Grove & Gray, 2018:134), collecting data in Matwabeng was not an easy task. At first, the fieldworkers were not trusted at all by the frail elderly. One reason for this could have been because they were known in the community, and the people knew where they worked. Some of the frail elderly assumed the field workers wanted to take their pension grants and put them in the old age facility. Bearing in mind that their pensions are their main income for most of the frail elderly, this was unacceptable to them. In an effort to waylay the distrust, the researcher and one of the field workers contacted the local Naledi radio station in Matwabeng, broadcasting the reason for the research and that they did not want to take away anybody's pension grant. Through this effort, the researcher tried to gain the trust of the home-based frail elderly in Matwabeng. Positive results were seen in the week afterwards. The field workers subsequently reported that they were often invited to drink coffee with the elderly.

Welcome rain in Matwabeng halted the data collection for a few days. Heavy rain in this rural area made it difficult for the field workers to walk from door-to-door on the gravel roads, with poor rainwater drainage. Despite this difficulty, the researcher continued to code and capture completed questionnaires received from field workers during this time.

Some really unexpected challenges were faced. While doing a door-to-door visit, a field worker interrupted an assault that had just taken place in front of the victim's two little children. The naked victim was still alive, with blood pumping from the carotid artery where she had been stabbed. Sadly, the victim, supported by the field worker, passed away. The perpetrator had been caught by the community members, as also witnessed by the field worker, who reported the incident to the South African Police Services. Debriefing and counselling by a social worker was provided to the field worker, and she was supported emotionally by the researcher. The counselling carried on, and the researcher decided to allow the field workers to work in pairs to

support each other. This slowed the data collection process down somewhat, but the safety; support and counselling of the field workers were a priority to the researcher. Despite the challenges faced, the researcher and field team managed to complete the data collection within 17 weeks.

As the researcher trusted the field teams doing data collection, this trust equalled validity in this research. Validity is an integral part of any research study.

### **3.10 VALIDITY AND RELIABILITY**

Validity is defined as producing accurate results, determined by internal, construct and external validity (Brink et al., 2018:151; Polit & Beck, 2017:209). In quantitative research, validity is associated with the measurability of results in the study. The level of validity indicates how profound the research is, thus design and research methods are influenced by validity.

In data collection validity means that the findings represent the phenomenon that is being measured. Different factors can affect a research study, and external influences can invalidate the findings. A credible researcher's primary responsibility is to control all possible factors that can threaten the research study's validity (Heale & Twycross, 2015:6; Polit & Beck, 2017:209).

In research, a reader wants to trust the findings of the study. In conducting quantitative research, the researcher wants to use the best research methods to get strong, measurable, numerical and statistical results. In this study, the frail elderly was firstly identified, and only then were the appropriate individuals asked about their specific care needs.

To determine validity in a study one could ask whether the findings reflect what is happening in the homes of the frail elderly on an ordinary given day. The questionnaire, developed from literature and from adapted instruments commonly used in the assessment of the elderly, as well as from previous studies, enhances the validity of this study. The scales that were consulted ensure good measurements

in the study, adding to the study's credibility as appropriate frail elderly participants were identified.

Reliability is the second quality measure for a quantitative study, indicating the accuracy of instruments consistently measuring the same despite the situation, and generating matching or similar results (Du Plooy-Cilliers et al., 2014:253). Reliability in the study was further ensured by training the field workers, and providing a practise run during the pilot study to build their self-confidence and accuracy. Face and content validity were thus addressed.

### **3.10.1 Face and content validity**

Face and content validity helped to improve the validity of the questionnaire. Face validity verifies that the instrument 'looked like' a questionnaire and had the appearance of credibility when assessing the content. On the other hand, content validity examines whether the method of measurement includes all the major elements related to the concept (Vakili & Jahangiri, 2018:106-107).

As previously explained, face validity is the weakest form of validity, and just means that a superficial examination of the instrument was done. Using face validity in this study refers to the supervisors' and biostatistician's fleeting review of the set of questionnaires, and the opinion of the two registered nurses who were also given the questionnaire to look at.

With reference to content validity, Joubert and Ehrlich (2007:120) mention that content validity measurement must account for all the elements of the concept that is to be investigated. To prevent irrelevant and unrealistic questionnaires, the researcher must use literature as review for the questionnaire and ensure during the pilot study that content validity remains relevant (Du Plooy-Cilliers et al., 2014:160; Polit & Beck, 2017:310). Content validity was addressed by combining literature reviews with standardized, accredited scales of daily living activities. The questionnaire's two parts were scrutinized by two knowledgeable registered nurses: One, a colleague with 16 years' experience in frail elderly care. The other, an

operational manager at the local Matwabeng primary health care clinic, with 22 years' experience of working with chronic diseases of the elderly. To further ensure that the structure of the questionnaire remained aligned with the objectives of the study, discussions with Primary Health Care nurses, as well as the researcher's own 28 years' personal experience in the care of frail elderly persons was utilized.

After scrutiny by the two expert nurses, no changes to the questionnaire were required.

The next phase of the study was data analysis.

### **3.11 DATA ANALYSIS**

As planned, the researcher collected the completed questionnaires from the field workers and captured the data onto an Excel spread sheet in her office. The spread sheet was prepared by the UFS biostatistician according to the questions in the questionnaires. Each field worker had been given an alphabetic code, with a numerical number at the top of the page of each questionnaire they completed. This was done to code each questionnaire on the spread sheet. A copy of the data, numbers and codes were saved on an external hard drive, kept in a locked cabinet after the coding was double-checked for any finger faults by a second research helper. The second research helper was the community health programme leader in Senekal, working at Glimlag Dienssentrum. To comply with the confidentiality requirements, the original, completed questionnaires were locked away safely in the researcher's office after the data was captured on the spread sheet (Cohen et al., 2018:186). Subsequently, the spread sheet was e-mailed to the biostatistician for analysis. To comply with ethical principles, only residence numbers were noted on the biostatistician's spread sheet.

Descriptive statistics such as frequencies and percentages for categorical data, and medians and percentiles for numerical data was used to describe and summarize the data in cooperation with a Biostatistician (See Chapter 1, 1.8).

In this manner, the researcher ensured that ethical principles were maintained and taken into consideration throughout the study.

### **3.12 ETHICAL CONSIDERATIONS**

All research must adhere to strict ethical principles to be found credible by the reader. For this study, the researcher used the verified ethical principles of the Belmont Report and the Nuremburg Code (Brink et al., 2018:28; Polit & Beck, 2017:139). The Nuremburg Code focuses on volunteerism.

#### **3.12.1 Volunteerism**

According to the Nuremburg Code of 1947, volunteerism by prospective subjects is absolutely essential in consent, and an individual's self-determination or choice regarding participation, or not, must be treated with respect. Frail elderly are a vulnerable group, must be treated with respect and be allowed self-determination. Their right to choose must be protected, but they also need to be protected from poor, irresponsible choices (Cohen et al., 2018:240; Grove & Gray, 2018:130).

Participation in the study was voluntary, which indicates the researcher's respect for individual participants. Volunteerism entails participants' right to access all relevant information and their subsequent freedom of choice. Prospective participants in the study received an information leaflet that was discussed with them before voluntary consent was obtained by the field workers. The elderly participants were also informed that they were able to withdraw from the study at any time without harm, as their participation in the study was totally voluntary.

The Belmont report of 1978 (Friesen, Kearns & Redman, 2017:15), mentions that one must consider beneficence and non-maleficence when conducting research.



### **3.12.2 Beneficence and non-maleficence**

Beneficence and non-maleficence refers to the ethical obligation to maximize benefit and to minimize potential harm to participants. This requires that the risk of harm posed by the research must be reasonable in light of the anticipated benefits; that the research design must be sound, and that researchers must be competent to carry out the proposed research activities. Beneficence prohibits deliberate infliction of harm to persons. Sometimes it is expressed as a separate principle, namely non-maleficence (to do no harm). Research that requires human participants should seek to improve the human condition. If the research cannot do this, then it is unlikely to be ethical (Broomfield, 2016:32-38; DOH, 2015:14; Cohen et al., 2018:112,127).

With regard to beneficence, the researcher is of the opinion that this study will be of great value to the frail elderly in the future. If the care needs of the frail elderly are known, more can be done and planned for them without inflicting any harm.

Respect of the participants includes confidentiality as well as the indicated right to self-determination. Participants' right to full disclosure was complied with by providing them with all the necessary information by way of an information brochure. Relevant contact numbers were included in the information brochure should they wish to lodge a complaint or if they feel that their rights had been offended. Information was made available to the frail elderly in one of three languages of choice, namely Sesotho, Afrikaans or English. If the frail elderly participant did not understand the questionnaire, a field worker explained it to them. The frail elderly was assured that they would never be forced to participate.

To the minds of the researcher and consulted registered nurses, the questionnaire held no risk to the frail elderly and did not lead to any contentious or traumatic experiences; all were satisfied that non-maleficence was adhered to. In all, no known infliction of harm to persons was reported due to the completion of the study.

The researcher felt competent to carry out the proposed research actions. As a secondary benefit, provision was made for referral of identified cases that might be in

need of counselling or care by relevant organisations or local clinics. Unfortunately, trauma counselling and debriefing for the involved field workers was necessary, though not due to their own actions. This problem was thus managed by the provision that had been made for follow-up.

Finally, institutional approval of study was provided by HSREC of the UFS, approval number UFS-HSD2018/1092/2711 (Addendum H), as further verification of the research process.

### **3.13 SUMMARY**

In this chapter, the plan of action and methods used in the study of the care needs of frail elderly people resident in Matwabeng were discussed. Three relevant philosophical assumptions namely ontology, epistemology and methodology were identified and discussed. The processes of data collection and analysis were explained, and compliance to the appropriate ethical principles was set out.

In Chapter 4, the researcher will discuss the results of the study and give feedback regarding data analysis.

# **CHAPTER 4**

## **Results**

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### **4.1 INTRODUCTION**

In this chapter the researcher will discuss what the data revealed and interpret the results according to the research objectives. Figures and Tables are mostly used to discuss and explain the findings in this research study. The Department of Biostatistics of the University of the Free State assisted with the analysis of the data. Descriptive statistics such as frequencies and percentages for categorical data, and medians and percentiles for numerical data have been used.

The data collection questionnaire consists of two parts. Part One of the questionnaire, which collected biographical data, determined whether the respondent qualified being categorized as a frail elderly. Part Two assessed the care needs of the frail elderly. The results from Part One of the questionnaire will be presented and an explanation of how the frail elderly were identified will be discussed. Thereafter, the results of Part Two of the questionnaire on the care needs of the frail elderly will be discussed and explained. The aim of the study was to determine the care needs of the frail elderly living at home in Matwabeng.

In total, 2505 houses in Matwabeng were visited, identifying 235 elderly (9.4%). From these 235 elderly, 100 were identified as being frail (42.6%). Unfortunately, the fieldworkers mistakenly included two (2) frail persons who were not yet 60 years of age in the sample. Therefore, only 98 frail elderly are included in this study.

## 4.2 PROFILE OF THE FRAIL ELDERLY

Frail elderly are persons 60 years and older, who are defined being frail according to the Katz ADL. Such a frail elderly would need assistance with two or more ADL (Addendum A). Part One of the research questionnaire is a combination of the Katz ADL (Wallace & Shelkey, 2008:68) and The Lawton IADL scale (Graf, 2008:56) to evaluate the level of dependency of the elderly. Respondents scoring two or more “No” answers in Part One of the questionnaire were considered to be frail.

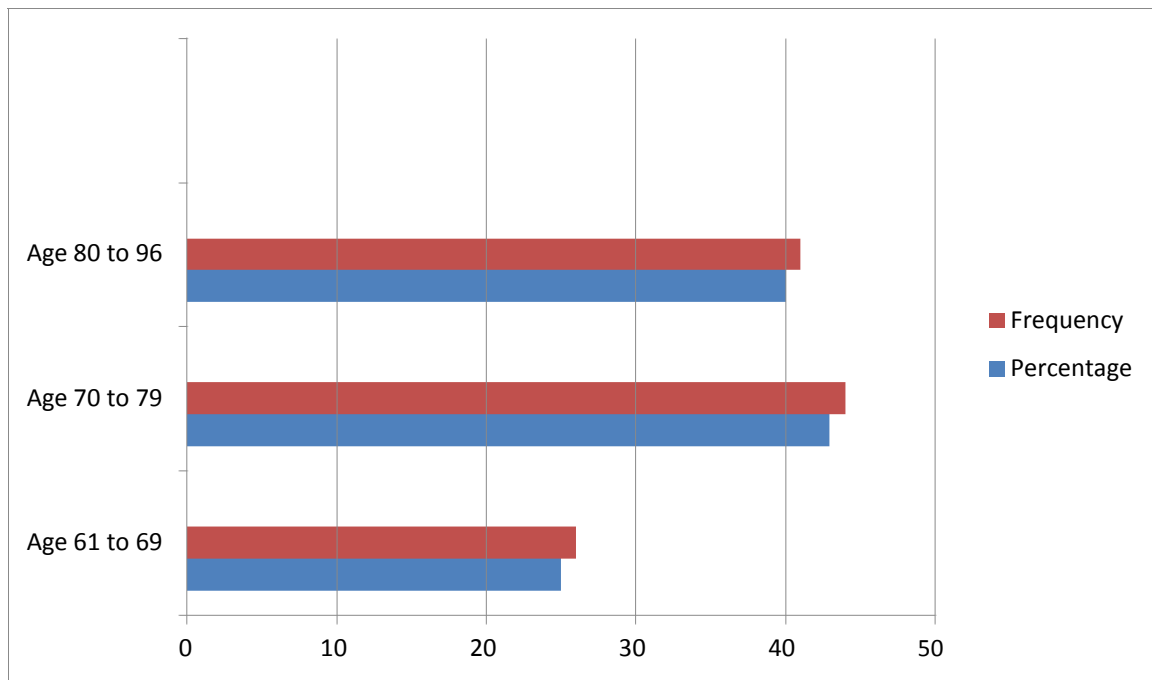
### 4.2.1 Biographical data

The biographical data collected included the respondents’ age; gender; occupation; level of education; marital status and home language.

**TABLE 4.1: Age of frail elderly respondents (Q1.3)**

<b>Maximum age / years</b>	<b>Minimum age / years</b>	<b>Median</b>	<b>Frequency, n=98</b>
<b>96</b>	<b>61</b>	<b>76</b>	<b>98</b>

When the age differentiation of the frail elderly are divided into thirds (61-69 years, 70-79 years and 80-96 years) it is clear that the majority of respondents in the sample fall in the higher age group. Most of the frail elderly in Matwabeng are between 70 and 96 years old. This is not surprising as frailty is linked to the aging process, but it does indicate that the frail in this township fall within a really elderly age group.



**FIGURE 4.1: Age group of frail elderly respondents (Q1:3)**

The gender ratio of the respondents is 19 (19%) males to 85 (83%) women, n=98. This corresponds with the results of the 2016 census from Statistics South Africa, which indicated that the number of elderly females aged 60 years and older was higher than elderly men (Statistics South Africa, 2016b).

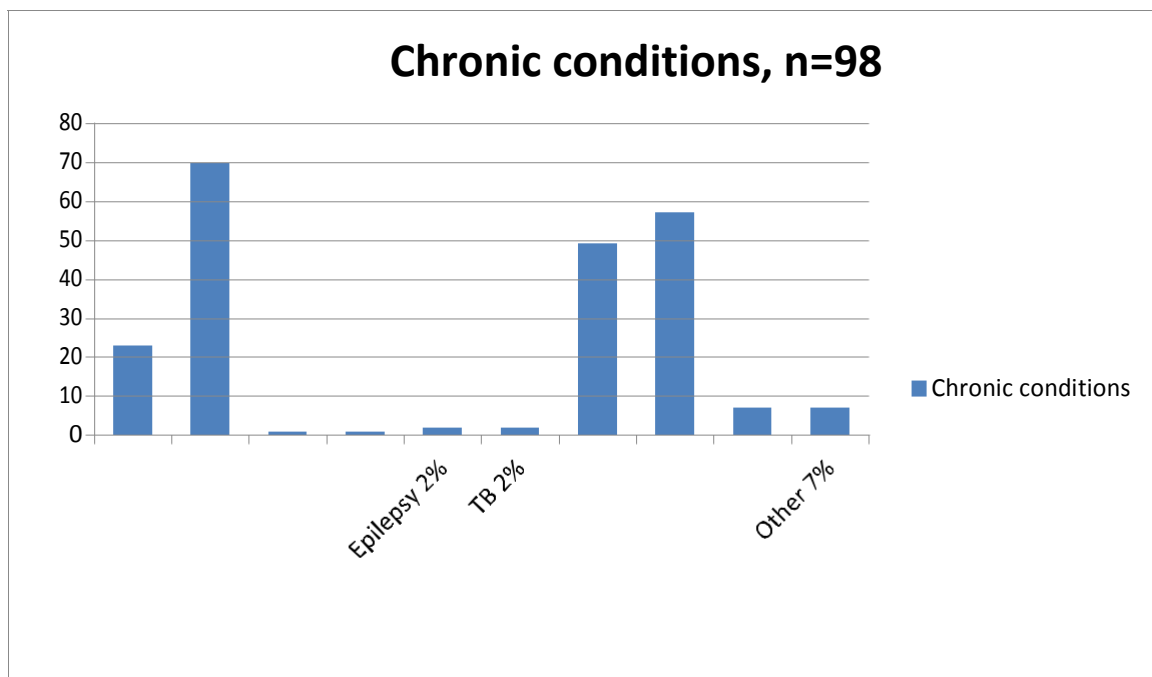
Most of the frail elderly (n=55.8; 57%) had worked as domestic workers, while the second largest group had been general assistants which accounted (n=14.7; 15%). Six of the frail elderly (6%) had been unemployed, and four had been cleaners (n=4, 4%) the other respondents did not worked (n=17.6; 18%).

The most commonly obtained schooling level was a primary school education, achieved by 63 participants (n=63; 62%); 32 (n=32; 31%) of the frail elderly had had no schooling' and 5 held a secondary school qualification (n=5; 5%). Only 2 (n=2; 2%) of the frail elderly had attained a diploma or degree qualification. This can be due to the fact that the South African democracy is only 25 years old, and most of the frail elderly lived through the restrictive apartheid era. Even though the questionnaire did not inquire where these people hailed from, this could also be an indication of the previous lack of opportunities in the rural areas.

Fifteen (n=15; 15%) of the respondents had never married; 51 (n=51; 50%) were widows or widowers, and connubial or traditional marriage accounted for 29 (n=29; 28%). Seven (n=7; 7%) of the frail elderly were divorced or separated. None of the frail elderly had live-in partners / spouses. All the respondents were Sesotho-speaking Black South Africans.

#### 4.2.2 Health profile

All respondents' chronic diseases and disabilities were listed, and are included in their health profile. All respondents indicated that they had one or more chronic conditions.



**FIGURE 4.2: Chronic conditions**

The majority of the frail elderly study respondents suffered from hypertension (70%); followed by arthritis (57%); eye problems (49%); and diabetes (23%). These conditions can combine to influence the care needs and the ADL of the elderly. Although it is not clear to what degree these diverse problems impacted on the frail elderly' vision, not being able to see properly would affect their ability to administer their own medication correctly. On the other hand, arthritis affects their mobility, leading to wide range of losses, e.g. socializing, self-care and general wellness.

Diabetes, arthritis, vision and hearing impairments can severely limit the activities of the frail elderly (Lishner, Richardson & Levine, 1996:45).

Comparing the researcher’s findings to the 2016 census findings from Statistics South Africa (2016a:1) indicates that hypertension has the highest prevalence of all the non-communicable diseases (NCDs) common among the elderly in South Africa (Statistics SA, 2016a:25). This source found that 84% of the elderly aged 65 and older suffered from hypertension, which increases with aging. The present study also indicated that hypertension had the highest prevalence of all the chronic conditions in among the frail elderly in Matwabeng.

In 2016, health care workers found a prevalence of 15.3% in diabetes mellitus among the elderly in the annual South African Demographic and Health Survey (SADHS, 2016). In this study, the prevalence of Diabetes mellitus was 23 of 98 (n=23; 23%). This percentage is significantly higher than the SADHS prevalence. However, as the researcher specifically concentrated on frail elderly, age-related diabetes could explain the discrepancy. On the other hand, the findings could also imply that the impact on diabetes mellitus might be underestimated in South Africa.

Looking at the “other” categories listed in Q1:8(10), more chronic conditions were identified in Matwabeng (Table 4.2).

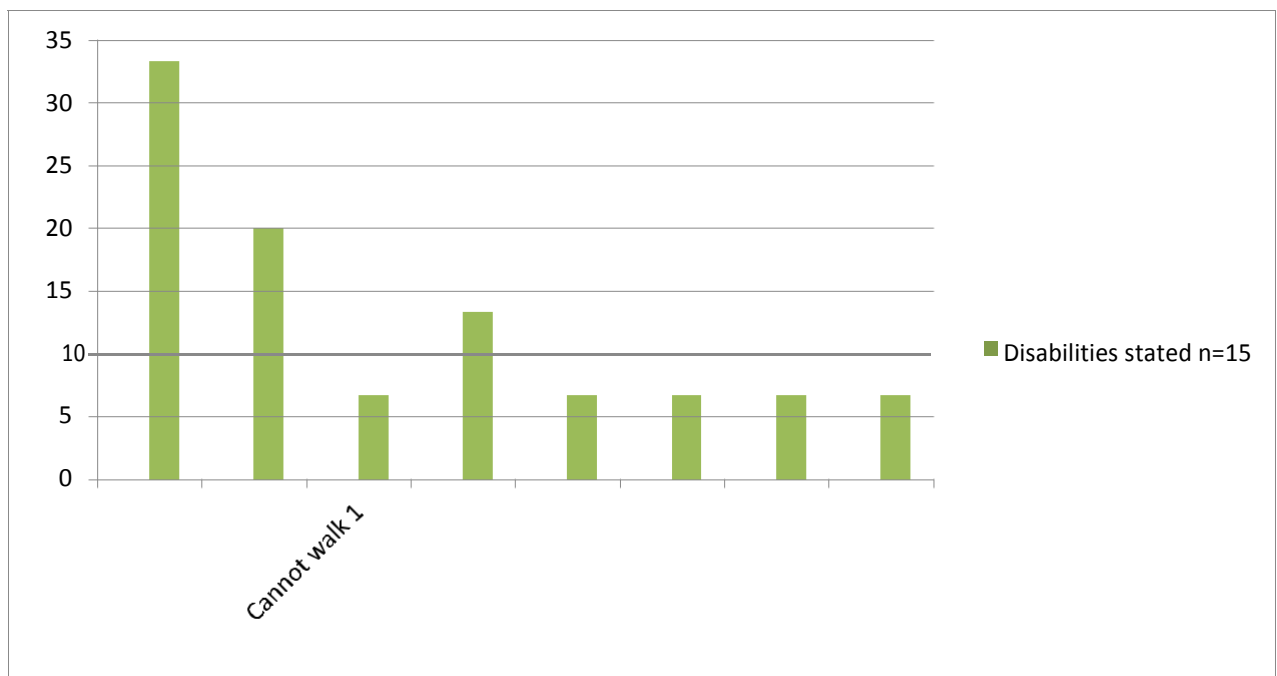
**TABLE 4.2: Other chronic diseases mentioned**

<b>Other conditions</b>	<b>Frequency, n=5</b>	<b>Percentage, (%)</b>
<b>Allergies</b>	2	2.5%
<b>Back problems</b>	1	1.25%
<b>Hart problems</b>	1	1.25%

### 4.2.2.1 Disabilities (Q1:10)

The largest number of disabled persons will be found among the frail elderly, as frailty, disability and comorbidity are closely related but not synonymous (Clegg, 2011:73). Because of this relationship between frailty and disability, it is necessary to get a clear idea regarding what the disabilities of the frail elderly in Matwabeng are because of the impact this has on their multiple and complex health care needs.

Of the 98 respondents (n=15; 15.3%) mentioned that they have a disability. The following disabilities were indicated, calculated out of 15 (n=15):



**FIGURE 4.3: Disabilities mentioned**

The most common disabilities found among frail elderly were eye problems (n=5; 33%), mentioned by five respondents, followed by three respondents who mentioned having back problems. Two of the frail elderly presented with foot problems. There was one frail elderly who cannot walk; one who had difficulty in hearing; one with speech problem; one with deformed hands, and one was physically disabled due to a stroke. This question was left open-ended on the questionnaire, and the information gathered was very comprehensive, which provides an indication as to the variety of disabilities affecting the frail elderly of Matwabeng.



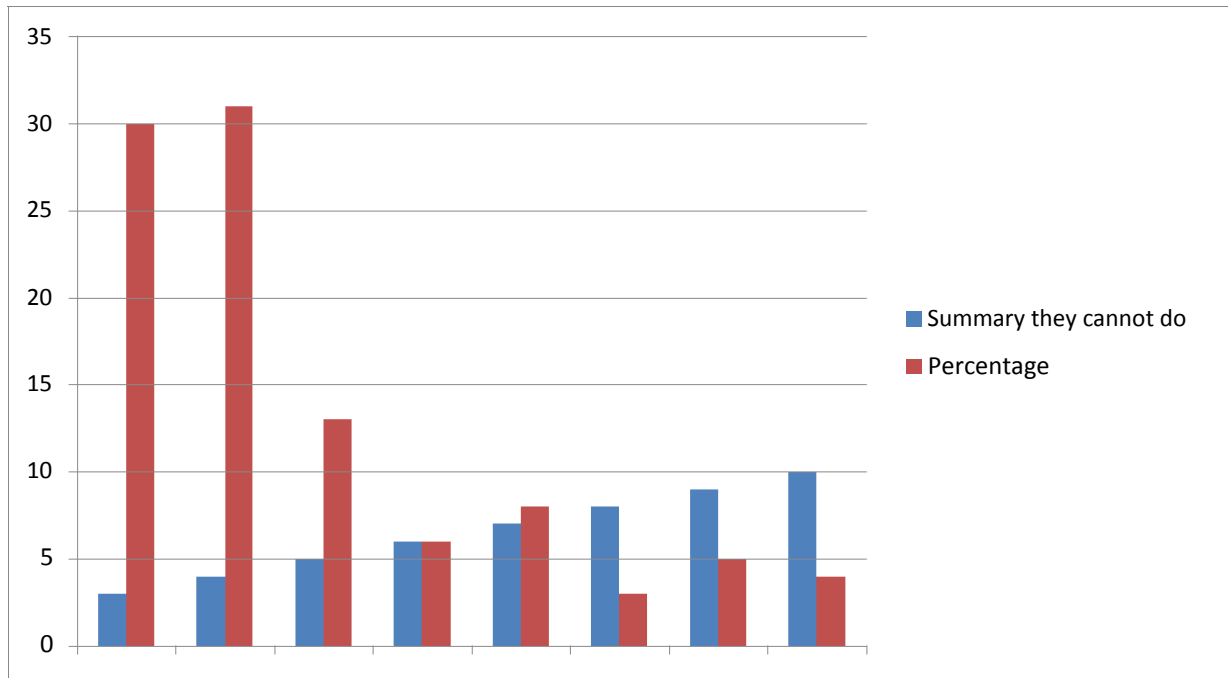
### 4.3 IDENTIFYING THE FRAIL ELDERLY

The following activities form part of Part One of the questionnaire. These activities were derived from a combination of the Katz ADL (Wallace & Shelkey, 2008:68) and The Lawton IADL scale (Graf, 2008:56). Respondents who indicated that they had problems with two or more of these activities were defined as being frail.

**TABLE 4.3: Activities of daily living that frail elderly are unable to do (Q1:11)**

<b>Activities of Daily Living</b>	<b>Frequency participants that was not able to do n=98</b>	<b>Percentage</b>
Can you bath/shower and wash yourself on your own?	19	19.4%
Can use toilette on your own/climb on and of toilet or commode self?	17	17.4%.
Can you dress yourself / upper and lower parts?	35	35.7%
Can you climb in/out of bed by yourself?	65	66.3%
Do you have good self-control over bladder and bowel functions	62	63.3%
Can you prepare your own meals daily independently	42	42.7 %
Can you take your own medication daily correct and on time?	41	41.8%
Can you do your own shopping in town?	83	84.7%
Can you walk on your own or climb steps?	88	89.8%
Can you prepare and cook your own meals daily?	38	38.8%

By summarising the activities (ADL) mentioned in Table 4.3, Figure: 4.4 provides a clearer picture of the number of activities the frail respondents were unable to do.



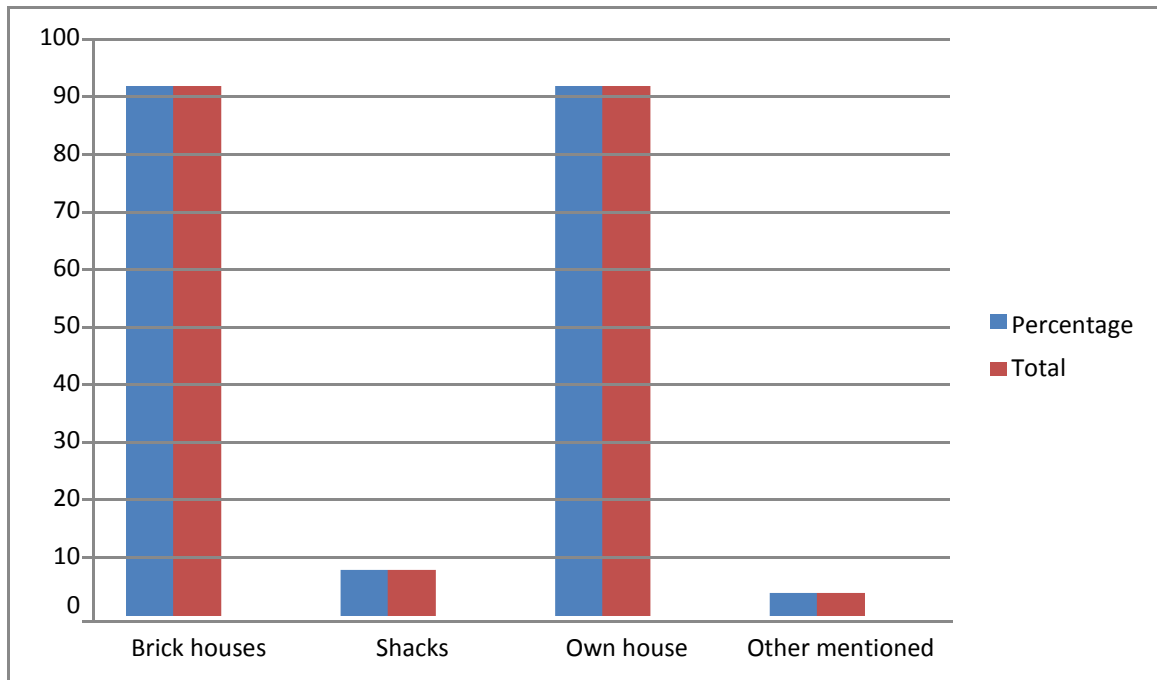
**FIGURE 4.4: Summary of the number of activities respondents were unable to do**

In total, 30 respondents could not do three ADL; while four respondents could not do any of the 10 activities. The median was four activities. This indicates the level of severity of frailty in the group. The elderly found it difficult to distinguish between question 6 and question 10; this was a limitation in the Part One of the questionnaire.

As explained, Part Two of the questionnaire focused on the specific needs of the frail elderly. The next part of this discussion is based on this portion of the Questionnaire.

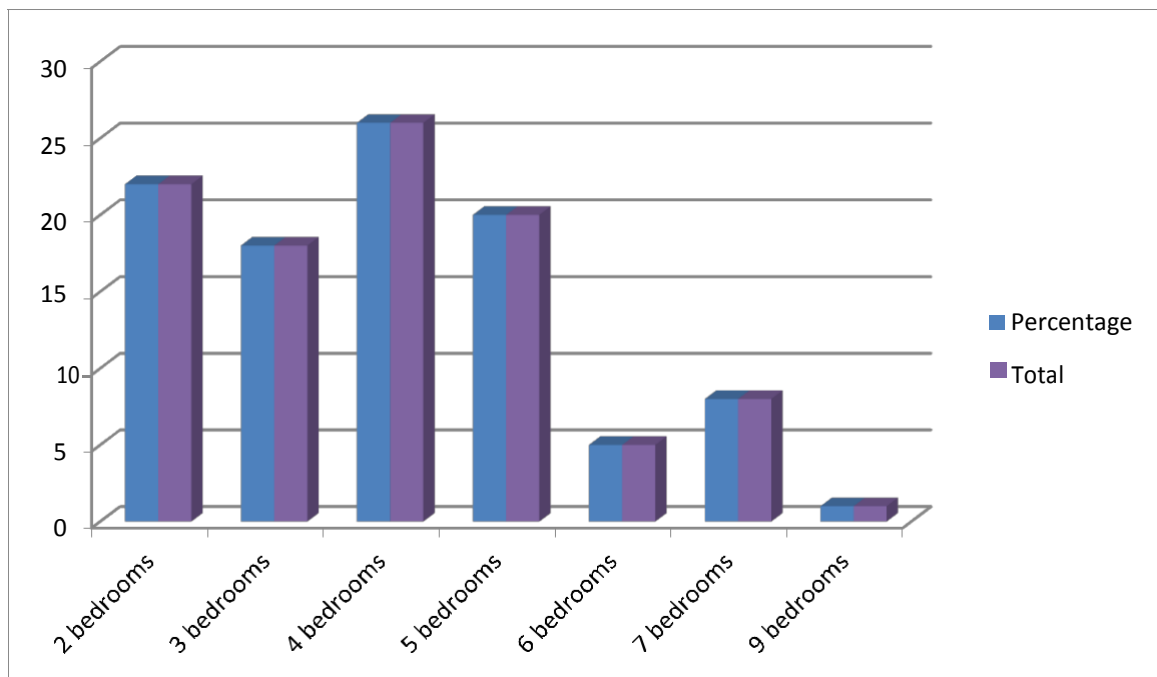
#### **4.4 GENERAL INFORMATION (Q2: NUMBER 1-13)**

The section under general information covered a description of the housing situation and movement of frail elderly in the Matwabeng community.



**FIGURE 4.5: Housing situation (Q2:1-13)**

**1 and 2) House type:** The majority (n=98; 88%) of the frail elderly live in a brick houses and owned their house. Only eight (8%) lived in a shack, and four (4%) lived with other people in a house, namely their late grandparents. The rest rented the house, or it belonged to a family member.



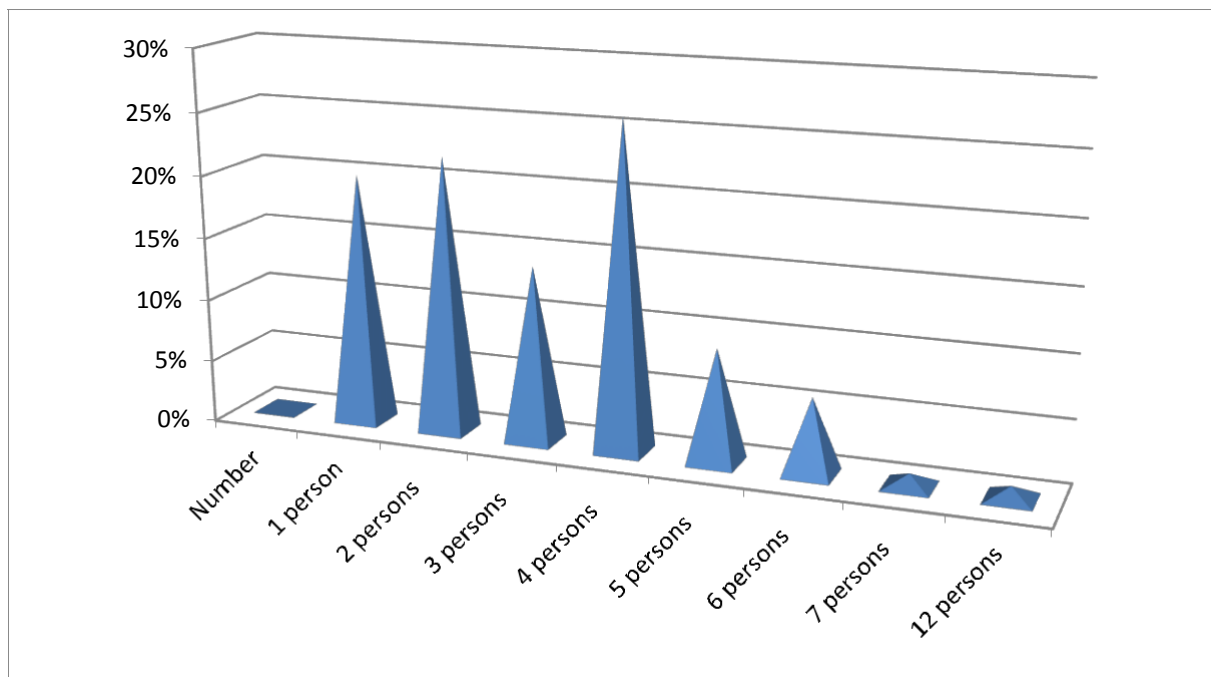
**FIGURE 4.6: Number of bedrooms per house**

### 3) Bedrooms in the house

On average (n=98; 86%), most of the respondents' houses had four bedrooms. The number of bedrooms varied between two to four, including additional shacks built onto the houses. The respondents indicated that five (5%) of the houses had six bedrooms; eight (8%) had seven rooms and one (1%) had nine rooms. The houses with the seven and nine rooms also counted shacks added on to the houses.

### 4) Number of people living in the house

In regard to the question on the number of people living at home with the frail elderly, the following:



**FIGURE 4.7: Number of people living in the house**

Most of the frail elderly lived in a house with four other people (n=98; 27.7%); while 22 lived with two people (n=98; 22.5%); and 20 lived alone (n=98; 20.4%). The maximum number of people found living in the one single household was 12.

### 5) Total income of the household

For 96 frail elderly (n=98; n=97.9%), the main or only source of income in the household was a SASSA social grant, currently R1860 or R1880pm paid to

elderly persons 60 years and older, depending on the recipient's age. Only two (2%) of the frail elderly receive a private pension. This finding is in line with the 2018 statistical summary of social grants in South Africa, which states social grants is the main source of income for most of the elderly in the Free State 80.9 (81%) (Malange, 2018). In Matwabeng the researcher found that 97.9% of the elderly interviewed received social grants. This data differs from that of the rest of South Africa, which indicates that 81% of elderly are receiving social grants. The reason for this discrepancy is that a) the sample group only consisted of frail elderly; b) the respondents were all Black frail elderly.

#### 6) Toilet(s) in the house

Forty-seven frail elderly (n=47; 47.9%) had toilets in their homes, while 65 (66.3%) of them had a toilet situated outside. Keeping in mind that 88 (89.8%; Table 4.1) of the frail elderly were unable to walk or climb stairs on their own, this were a problem for many of them. All the residents in Matwabeng are fortunate to have flush toilets, while in Tambo development just opposite Matwabeng, most of the residents still have to use the bucket system toilets (Van der Merwe, 2020).

#### 7) Preparing meals in the house (Q2:9-11)

The preparation of food and method of cooking by the respondents were described as follows:

**TABLE 4.4: Preparing meals**

<b>Number of participants</b>	<b>Place to prepare meals (n=98)</b>	<b>No place to prepare meals</b>	<b>Electricity</b>	<b>Gas</b>	<b>Paraffin</b>	<b>Wood/coal</b>
<b>97</b>	<b>98.9%</b>	<b>Only 1 (1%)</b>	<b>97 (99% used electricity)</b>	<b>1 (1%)</b>	<b>6 (6.1%)</b>	<b>8 (8.2%)</b>

Most of the frail elderly had somewhere specific to prepare their meals, one (1%) person had no place to prepare meals, 97 (99%) have electricity to cook their food.

### 8) Access to water (Q2:12)

Water is a basic human need that can be a challenge in rural areas. For the frail elderly, having easy access to water is especially important. The interviewed frail elderly respondents were asked about their access to drinking water.

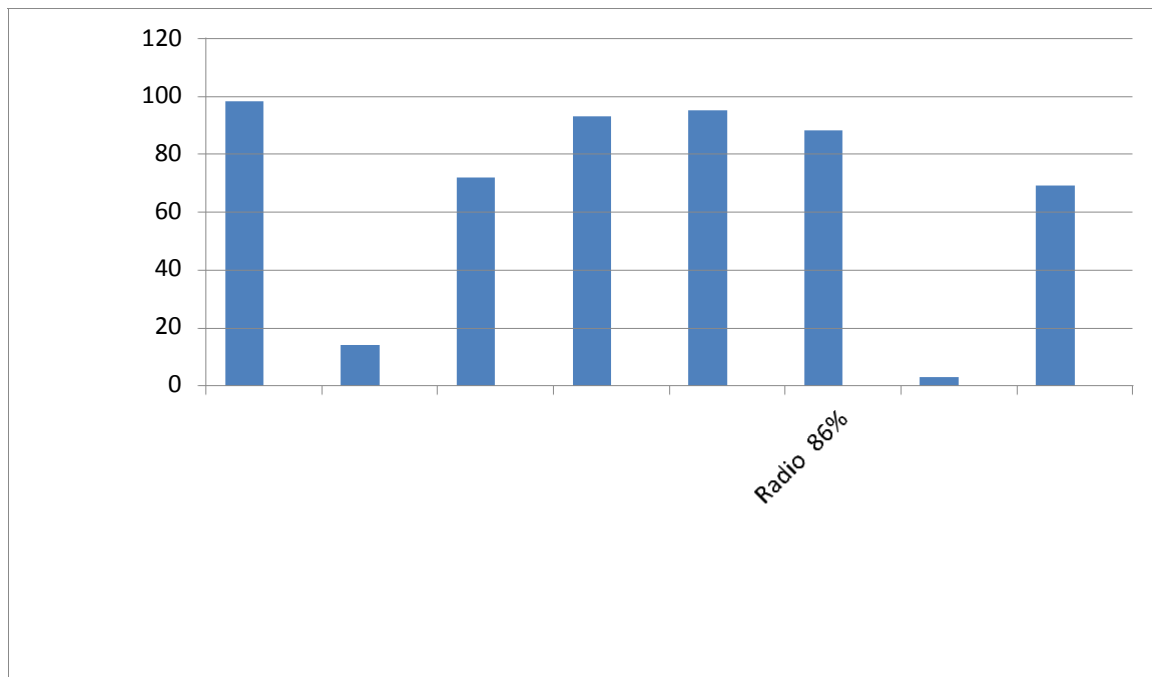
**TABLE 4.5: Source of water**

Tap inside home	Tap outside the home	Communal tap
33 (33.7%)	63 (64.3%)	2 (2%)

Most frail elderly's (n=70; 71.4%) water taps were outside their homes. The mean distance to the tap for 55 (56%) was one metre, while 61 (62.2%) had access to a tap 2 metres away. The furthest distance to a water tap for 11 respondents (11%) was seven metres. This means most of the frail elderly had to leave their houses to find drinking water and carry it inside for use. Two of the elderly had to rely on communal taps (2%). However, the questionnaire did not inquire whether this was an obstacle for the frail elderly. Taking a closer look at this might have been useful for the sake of inclusiveness.

## 4.5 ACCESS TO COMMON HOUSEHOLD ITEMS

The accessibility of common household items impacts on the needs of the frail elderly as procuring them is such an effort for these people.



**FIGURE 4.8: Access to household items**

All the participating frail elderly had access to a stove (gas, coal or electricity). Only 14 of them (n=14; 14%) made use of a primus or paraffin stove. This indicates that all the elderly had access to some type of appliance with which to prepare food. They could also access microwave ovens (71%) and refrigerators/freezers (91%). Only two (2%) indicated access to computers. Of all the respondents, only 69 (68%) had cell phone access, but 88 (86%) of the frail elderly indicated that they often listened to the radio. Taking into account that most of these frail elderly grew up in the era of radio, it was interesting that 95 (93%) of them had a television set. Television was first seen in South Arica in 1975, when the youngest of the interviewed respondents was 16 years old. From this data, it is interesting to find that more frail elderly accessed television than radio, even though some of them reported having vision problems. Perhaps this was due to the fact that most of the elderly had younger aged people staying in the house with them, as well?

#### **4.6 Access to shops, clinic and church (Q2.15)**

As most of the frail elderly indicated that they were dependent on others for help in the questionnaire on ADL, it was important to look at their exact need for assistance.

**TABLE 4.6: Assistance to shops, clinic and church (Q2:15)**

1. Needs assistance on any shopping trip	2. Shop independently for small purchases	3. Independently, take care of all shopping's needs	4. Completely unable to shop	5. Other
70 (71.4%)	13 (13.8%)	3 (3%)	15 (15.3%)	None

Most of the frail elderly (n=70; 71.4%) could not function independently when it comes to shopping or getting around. The formatting of this question (Q2:15) was, as this question should only have focussed on shopping. This misunderstanding was only picked up in the final data analysis. The inclusion of clinics and churches is addressed in Q2:31 and Q2:24.

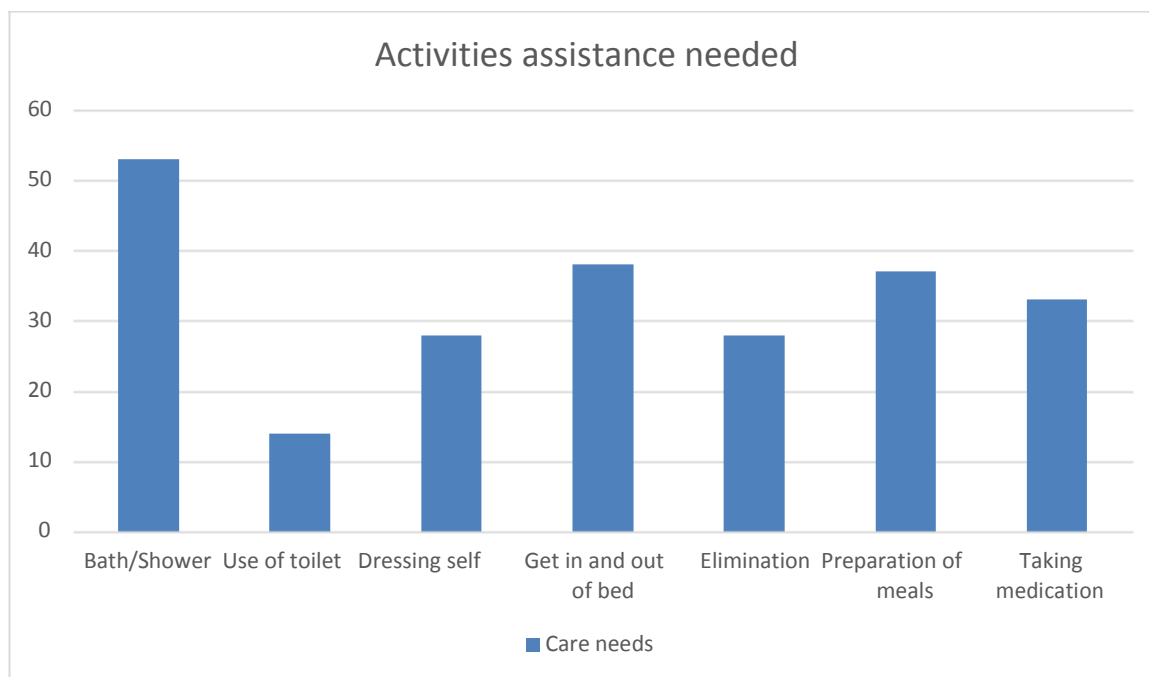
## **4.7 EXPLORATION OF NEEDS**

As no statistics of literature is available on the exact care needs of the frail elderly, a closer look at most specific need of the frail elderly Matwabeng was warranted by way of this study. The following information was collected:

### **4.7.1 Activities frail elderly need assistance with (Q2:16-18)**

Respondents that were interviewed or who completed the questionnaire themselves indicated that they needed assistance with the following activities.





**FIGURE 4.9: Activities frail elderly indicated that they needed assistance with**

The majority of the frail elderly (56%) need someone to help them bath / shower or wash themselves. All of the frail elderly interviewed needed some level of assistance in one or more of these activities. However, (n=77; 78.6%) mentioned that they required someone to help them at home in general.

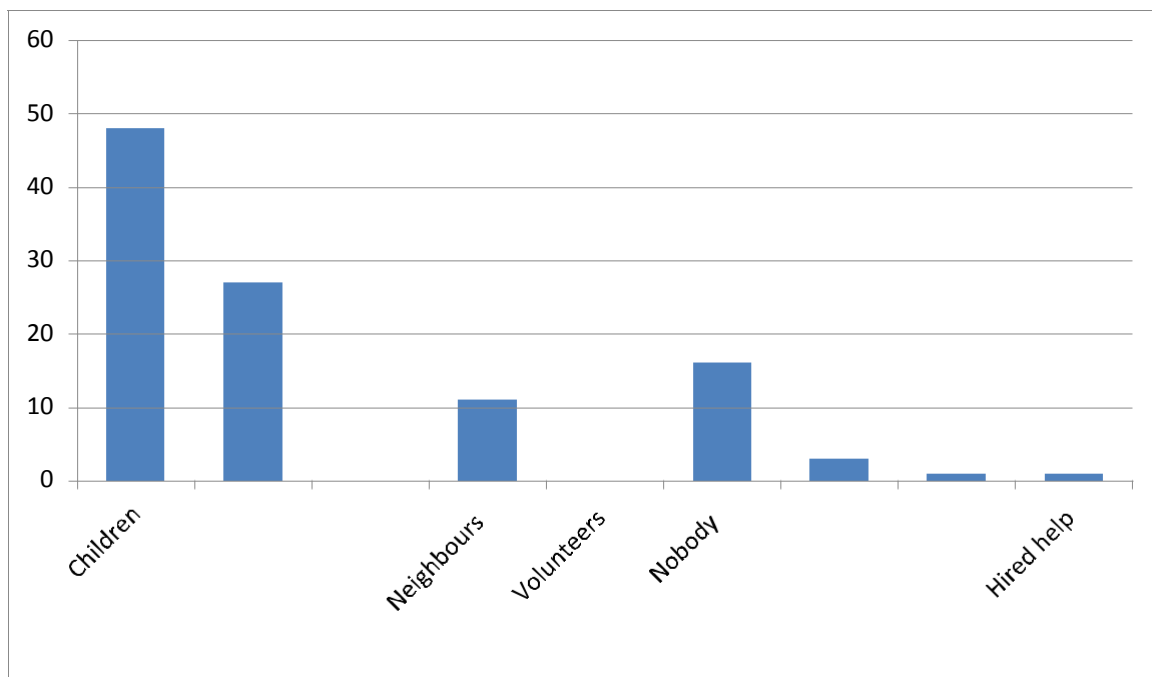
The reason for needing help can be divided into three main groups: Some needed help with a) specific tasks like cleaning or laundry, while others indicated that their needs arose from b) physical disabilities like arthritis; backache; visions problems, or lack of mobility. One elderly mentioned c) living with a disabled grandson, with whom additional assistance was needed. In particular, (n=17; 22.1%) indicated that they needed help with some activities; 15 (19.5%) lived alone and had no help in the home at all; 15 (19.5%) mentioned they lived with grandchildren, but still required help, and five (6.5%) of the frail elderly needed help with all activities at home. This question was possibly also misunderstood, as six elderly (7.8%) of the respondents answered “too old, cannot do nothing”.

The physical impairments listed by the frail elderly as a reason why they needed assistance includes eye problems; “problems” with hands, knees, back; and arthritis.

These problems all caused an inability to function independently, which lead to them having to seek help at times.

#### 4.7.2 Help available at home (Q2:19)

The following persons were reported to have assisted and cared for the frail elderly who required help at home.



**FIGURE 4.10: Persons who helped and cared for the frail elderly at home**

From Figure 4.10, it is clear that the majority of frail elderly respondents (n=48; 48.7%) got assistance and care from their children. Family members accounted for 27 (26.7%) sources for assistance. No Home Base Carers were mentioned as a source of help or care. Those being assisted at home by neighbours numbered 11 (10.7%). Neighbours were also identified as informal volunteers. In total, 16 (16%) of the frail elderly reported that they had no one to help or care for them. Three frail elderly (2.7%) mentioned having domestic workers who helped and cared for them. One

(1.3%) frail elderly was cared for by their grandchildren and specially hired help was only used by one (1.3%) frail elderly, these were other help and care specified by the elderly as these was not directly in the questionnaire.

Even though the frail elderly need care, they often do not receive it. Considering the variety of persons that had helped or cared for the home-based frail elderly, it is clear that 91% of the respondents had only received informal assistance and care. None of the respondents mentioned receiving any professional care at all.

### 4.7.3 Reasons indicated for lack of care (Q2.20)

A number of reasons were given as to why the frail elderly had no help at home.

**TABLE 4.7: Reasons given for no care being available**

Reasons mentioned by frail elderly	Frequency n=96	Percentage, (%)
Financial reasons	45	46.9%
Nobody to help	20	20.8%
Lives with grandchildren, who aren't trained to help	7	7.5%
Lives alone	7	7.3%
Can't do anything for themselves	7	7.3%
Neighbours help, but are untrained	2	2.1%
Children are married cannot help	2	2.1%
Children are dead	2	2.1%
Has problems requiring care	2	2.1%
People don't help the poor	2	2.1%

Forty-two (46.9%) respondents mentioned that they could not afford to pay for a helper to care for them. It is important to bear in mind that the main income of 97.9% of the frail elderly in Matwabeng is only a SASSA pension grant.

The second-most frequent answer, offered by 20 frail elderly (19.5%), was that they did not have anybody to help them, and while seven respondents (7.3%) indicated that they lived alone, the same number of respondents said that they could not do anything for themselves. A similar number of respondents mentioned that they lived with their grandchildren, who were untrained to care for them. Two respondents (2.4%) added that their children were married and could not help. Further reasons that were also offered included that the frail elderly's' children were dead; that neighbours tried to help, but were untrained, or that they had problems and needed care themselves. Some were of the opinion that people did not help the poor. When

considering some of the answers, it might seem that the question was not clearly understood by all the respondents. What is clear is that, in spite of great need in the community, there seems to be no professional, organised help available.

#### **4.7.4 Activities at home that the frail elderly need help with (Q2.21)**

Specific activities in and around the home where the frail elderly need help with are described as follows.

**TABLE 4.8: Activities frail elderly needs assistance in**

<b>ACTIVITIES</b>	<b>Number respondents need help n=98</b>	<b>Percentage (%)</b>
Washing clothes	84	85.7%
Ironing clothes	82	83.7%
Prepare and cook meals	67	68.4%
Cleaning the house	81	82.7%
Gardening	79	80.6%
Shopping independently	77	78.6%
Personal Hygiene	76	77.6%

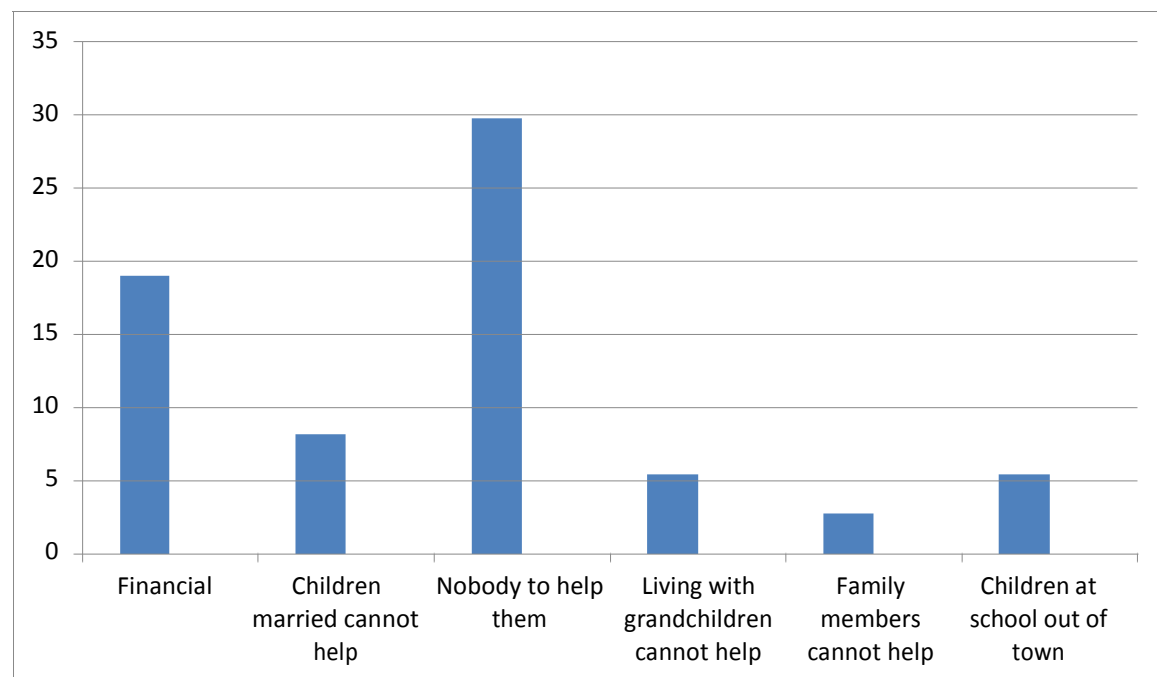
The majority of the entire group (n=98; 69.4%) mentioned they needed help with activities at home, while 30 frail elderly (n=98; 30.7%) stated that they did not need any help with daily activities. The type of help the frail elderly mostly needed was with washing their clothes (n=84; 85.7%) and ironing (n=82; 83.7%) as indicated in table 4.8. It was therefore clear that most frail elderly, (n=76; 77.6%) wanted help with personal hygiene.

#### 4.7.4.1 Indication that help had been received (Q2:22)

Some respondents indicated that they did not have some assistance, with 63 (64.3%) saying that they had someone to help them with activities mentioned in table 4.8, while 35 (35.7%) respondents had nobody do help them.

#### 4.7.4.2 Reasons mentioned for lack of help (Q2.23)

As indicated above, 35 (n=35; 35.7%) of the frail elderly had no one to assist them. The reasons for this are tabled in figure 4.11, (n=35).



**FIGURE 4.11: Reasons for absence of help mentioned by the frail elderly**

When comparing the information from Table 4.7 with that of Figure 4.11, the main reason mentioned by the frail elderly for the lack of help was financial. There is some distinction here, however. While 11 (n=35; 31.4%) frail elderly reported a lack of help, six respondents (n=35; 17.1%) mentioned that they have their own helper.

When comparing these responses for the lack of assistance to those in Question 18, the answers differ somewhat but themes seem to be recurring. Finance and the absence of children seem to be the main reasons for having to cope without assistance.

## **4.8 SOCIAL ACTIVITIES**

Loneliness has always been a problem among the elderly (Donaldson & Watson, 1996:952), and possibly even more so among the frail elderly. To explore the activities of the frail elderly in Matwabeng, the respondents were requested to indicate their social involvement in the community.

### **4.8.1 Participation in social activities**

Only 13 (13.3%) of the frail elderly participate in social activities, while 62 (63.3%) did not participate in any social activities in the community. It seems that 23 (23.5%) of the respondents were not / had not been aware of any social activities that were available in their area. Beyond the possible difficulties socialization might cause, it seems as if there is a lack of knowledge about opportunities to socialize as well.

### **4.8.2 Social activities the frail elderly participate in (n=13)**

From the research data, it seems that frail elderly participates in only two types of social activities: Church activities and a luncheon club called the lthuseng luncheon club. The lthuseng club meets three times per week for lunch and other social activities. From the data, 11 respondents indicated that they attended church activities (n=11; 84.6%), while 2 (n=2; 15.4%) attended the mentioned luncheon club functions.

**TABLE 4.9: Activities frail elderly participate in**

Place	Frequency (n=13)	Percentage, (%)
Church activities	11	84.6%
Ithuseng Luncheon club	2	15.4%

### 4.8.3 Reason why frail elderly do not participate in social activities

Reasons mentioned by frail elderly why they do not participate in social activities include:

**TABLE 4.10: Reason for not participating in social activities (Q2.26)**

REASON	Frequency (n=60)	Percentage, (%)
Does not know of any activities	23	38.3%
Does not enjoy participating	11	18.3%
Cannot walk long distances	10	16.6%
Cannot participate	6	10%
Too weak / old	6	10%
Cannot see	2	3.3%
Back problems	1	1.7%
Arthritis limits participation	1	1.7%

One of the reasons for non-participation seems to be due to the physical condition of the frail elderly, as mentioned by 20 persons (32.3%). As can be seen, their physical limitations include lack of vision, arthritis; weakness, and back problems. This number corresponds with the number of frail elderly who reported that they could not walk independently in Part One, Question 1:11.9 of the questionnaire. Sadly 23

(37.1%) were not aware of any activities, while 11 (17.7%) stated that they did not enjoy such activities.

#### 4.9 FRAIL CARE SERVICES IN THE COMMUNITY (Q2:28-30)

Only 1 (1%) of the respondents knew of any care services in the community. The rest did not know of such services. The only service mentioned by the frail elderly was the elderlys’ luncheon club (lthuseng), but this club does not deliver any frail care in the community. Only three (3.4%) of the frail elderly respondents were recipients of care, while the majority of the frail elderly (95.9%) made no use of any type of frail care services. The purpose of this question was to determine if there were frail care services available in the community. From the answers, it is clear that no such service is available.

#### 4.10 VISITS TO LOCAL CLINICS (Q2.31)

The number of frail elderly making use of the local clinics was 84 (85.7%), while 14 (14.3%) did not attend the local clinics. The following reasons were given as to why the 14 respondents did not utilize the clinics (n=14):

**TABLE 4.11: Use of local clinics by frail elderly**

Reason mentioned	Frequency (n=14)	Percentage, (%)
Does not like the local clinics	6	42.9%
Cannot walk	2	14.3%
Prefer own doctor	1	7.1%
New residents - do not know the clinics	1	7.1 %
Too far from the home of the frail elderly	1	7.1%
Queues too long	1	7.1%
Doesn't get sick	1	7.1%
Too old to go	1	7.1%



The main reasons for avoiding visits to the local clinics were that the respondents' did not like the local clinics, as well as an inability to walk so far. When combining some of the collected data, one can see that accessibility of the services seem to be a problem. Respondents also said that the patient queues at the clinics were too long. Fourteen (14.3%) of the respondents do not make use of the local clinics at all, and one respondent preferred to use a private doctor. Aspects of the primary health care clinics' poor functionality, such as inaccessibility; non-preference; long queues and dissatisfaction have to be explored further, as local clinics should be available to all community members who need care.

#### **4.11 PREFERRED PLACE OF RESIDENCE (Q2.33)**

As stated previously, it is not possible to institutionalize all the frail elderly in South Africa who require care. At the same time, is also important to explore the preference of where frail elderly want to live. As stated, 72 (73.5%) of the respondents indicated that they wanted to stay at home, while 25 (25.5%) would prefer to stay in a residential facility colloquial referred to as an old age home. Others mentioned that they did not have any problems, and could stay anywhere. None of the frail elderly indicated that they wanted to stay with their children.

**TABLE 4.12: Preferred place of residence**

<b>At own home</b>	<b>Old age home</b>	<b>With children</b>	<b>Other</b>
72 (73.5%)	25 (25.5%)	None	1 (1%)

Although the reasons why some of the respondents would prefer living in an residential facility were not explored in depth, one might just wonder that, if the care needs of the frail elderly could be dealt with positively, they may want to stay at home as this is a more realistic and economical choice.

It is clear that the majority of the respondents wish to stay at home and interestingly none of them wants to stay with their children.

#### 4.11.1 Motivation for the choice / answer of Q2.33 (Q2.34)

**TABLE 4.13: Choice motivation**

Only 61 respondents give a response to this question.

Motivation of choice	Frequency n=61	Percentage, (%)
Love my space / home	21	34.4%
Loves familiar surroundings	10	16.4%
Likes living at home	8	13.1%
Feel safe at home	5	8.2%
Children take care of me	5	8.2%
Loves staying at home	3	5%
Lives with grandchildren	3	5%
Comfortable at home	1	1.6%
Likes be around people	1	1.6%
Lives alone	1	1.6%
Cannot afford to leave	1	1.6%
Worked hard to build a home	1	1.6%
Will live anywhere, just wants to be happy	1	1.6%

As illustrated, the majority of the frail elderly (77.1%) mentioned that they loved their home; loved their familiar surroundings; like living at home; were comfortable at home; felt safe at home and loved staying at home. Eight elderly mentioned that their children took care of them or that they lived with grandchildren. It is unknown whether this was by choice or for financial reasons, because as mentioned, none of the frail elderly chose to stay with their children. One person (1.0%) mentioned that they did not live in their house by choice, but because there was no alternative and another one (1.0%) noted that he / she lived alone.

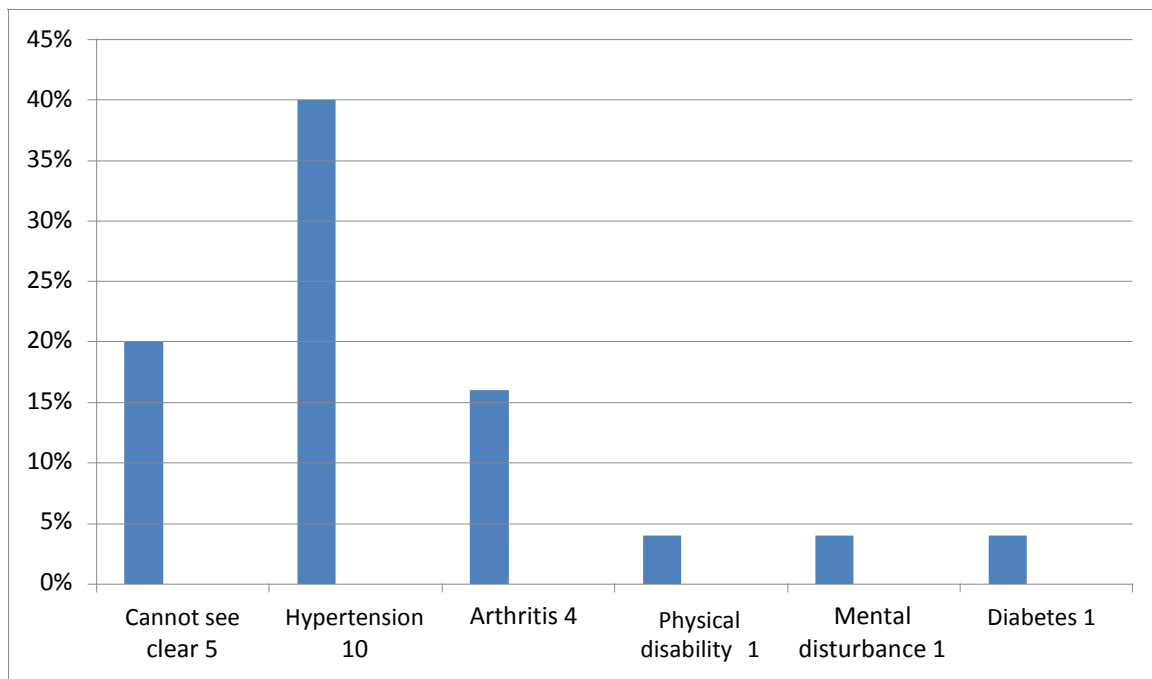
#### 4.12 DEPENDENCE WITH REGARD TO MEDICAL CONDITIONS, n=98 (Q2:35)

In cases where the frail elderly needed medical assistance, or someone to manage their medical condition, 25 (25.5%) of the frail elderly indicated that having medical assistance were their choice. On the other hand, 73 (74.5%) indicated that they did

not depend on or need assistance. The needs of the respondents who reported that they need assistance included help to measure blood sugar; monitoring blood pressure; administering medication, or dressing a wound at home.

#### 4.12.1 Medical conditions mentioned with regard to assistance (Q2:36)

The following summary is of those listed conditions for which 25 of the frail elderly respondents indicated they required assistance (n=25). 25.5% reported that they needed assistance with certain medical conditions.



**FIGURE 4.12: Medical condition requiring assistance**

Ten of the frail elderly (40%) mentioned that they have to depend on someone for assistance with their medical condition(s). The main conditions include hypertension (40%) mentioned by all ten frail elderly; an inability to see clearly by 5 frail elderly (20%); arthritis indicated by 4 frail elderly (16%); while one person each included physical disability; mental disorder and diabetes (4% each)

The aim of the study was to explore acknowledge, pre-selected medical conditions with which frail elderly commonly need assistance. It is unknown whether the study respondents' specific medical conditions are under control, however, as this falls outside the scope of the study. Considering that the management of diabetes is often complex, it is surprising that only one person indicated that they require assistance for it.

#### 4.12.2 Type of assistance already available (Q2:37)

Only 27 of the 30 frail elderly respondents indicate that some had previously received assistance at home form the following persons:

**TABLE 4.14: Persons helping frail elderly with medical condition**

Help with medical condition	Frequency, n=30	Percentage, (%)
Children / family members	24	80%
Neighbours	3	10%
No help	3	10%

Children and family members were the greatest source of assistance to those respondents who had help. Sadly, three respondents do not have help, which is so often the case among elderly persons. The lack of professional assistance is glaring. Incorrect management of medical conditions can have severe repercussion and this is cause for concern.

#### 4.13 REGULAR MEDICAL CHECK-UPS (Q2:38)

Only 22 (22.5%) of the frail elderly indicated that they did not regularly go for medical check-ups, while 76 (77.5%) did so. The following motivations were listed as to why the frail elderly failed to go (n=22).

**TABLE 4.15: Regular medical check ups**

<b>REASON</b>	<b>Frequency, n=22</b>	<b>Percentage, (%)</b>
No need to go, general healthy	8	36.4%
Cannot get medical help	4	18.2%
Go only when sick	4	18.2%
Too weak to go	1	4.5%
Do not go for medical check-ups	5	22.7%

What is of great concern here is that five of the frail elderly (22.7%) do not go for regular check-ups due to inability to reach medical help; being too weak to go, or a lack of resources.

#### **4.14 NUTRITIONAL STATUS (Q2.40)**

An exploration of their respondents' nutritional situation rendered the following information:

##### **4.14.1 Indication whether respondents eat enough per day**

Most of the frail elderly (n=98; 97%) mentioned that they ate enough per day, while only three (n=98; 3%) answered that they did not eat enough food per day. The questionnaire only explored the "NO" answers (Q2:41). Financial reasons were given as the main cause for their lack of eating enough by three respondents (3%).

##### **4.14.2 Expenditure on food per month (Q2.42)**

The frail elderly spends a maximum per month of between R200 (one respondent) to R2000 (three respondents) on food. Most of them, (21.7%) spent approximately R600 to R900 per month on food. The most frequent amount was R800, spent by twenty-one (20.7%) of the frail elderly. In 2016, Statistics South Africa (2016a:2) stated that malnutrition among the elderly could be due to poor dietary practices. They also stated that the nutrition and health of the elderly are often neglected (Statistics SA, 2016a:3). Assessing the respondents' reported average amount of money spend on food, this study seems to support literature.

### 4.14.3 Knowledge of the difference between healthy and unhealthy food (Q2.43)

A closer look at the respondents' knowledge of food indicated that half of them (n=49; 50%) did not know the difference between healthy and unhealthy food. Although only 49 frail elderly answer this question, it seems that it was quite difficult for them, or that most did not understand the question correctly. Some of the answers given by the respondents included examples of food, while others were generic things that they preferred to eat, for instance "vetkoek". The respondents' explanations indicated the following as the difference between healthy and unhealthy food:

**TABLE 4.16: Explanation between healthy and unhealthy food (Q2:43-44)**

Healthy food	Frequency n=23	Percentage, (%)	Unhealthy food	Frequency n=40	Percentage, (%)
Fruit & veg	8	34.8%	Makes you weak	15	37.5%
Give energy	7	30.4%	Causes illness	14	35%
Protects one	3	13%	Unhealthy/destroys	2	5%
"Pap"(porridge)	2	8.7%	Sugar & salt	2	5%
Beans	1	4.3%	Red Meat	1	2.5%
Low in sugar	1	4.3%	Lots of oil	1	2.5%
Body function well	1	4.3%	"Vetkoek"	1	2.5%
			Chocolate	1	2.5%
			Die early	1	2.5%
			High in sugar and saturated fat	1	2.5%
			Junk food	1	2.5%

As mentioned by Statistics South Africa (2016a:12), the nutritional problems of the elderly are mostly due to dietary inadequacies. From this study, this statement still holds true, as one frail elderly spent only R200 on food.

### 4.14.4 Example of healthy foods (Q2:44)

Twenty-three frail elderly (23.5%) answered this question, 8 frail elderly (n=23; 34.8%) indicated that fruits and vegetables were examples of healthy food. Two

elderly (n=23; 8.7%) listed “pap” and milk as examples of healthy food. Taking into consideration that additional vitamins and nutritional supplements are added maize meal in South Africa, this question was correctly answered. Answers such as “makes you weak” is perhaps an indication that the respondents did not understand the question fully.

#### **4.14.5 Unhealthy foods mentioned (Q2:44)**

Analysing the answers regarding unhealthy food indicated by 40 respondents, one (n=40; 2.5%) of the frail elderly indicated that “junk food” was an example of unhealthy food. Most interestingly, one (n=40; 2.5%) of the frail elderly mentioned that unhealthy food was high in sugar and saturated fat. This seems to indicate that the frail elderly must have had access to health information at some time in their lives. It also seems that the majority of the respondents knew the difference between healthy and unhealthy food.

#### **4.15 SAFETY AT HOME (Q2.45-47)**

When it comes to safety of the respondents’ homes, there are two aspects to consider, namely internal hazards and threats from outside.

##### **4.15.1 Internal hazards**

Regarding internal hazards, most of the frail elderly 50 (n=50; 51%) answered that they had had an accident in the past year (e.g. slipping or falling), while 48 (49%) answered that they had not had any accidents (n=98).

**TABLE 4.17: Indications of accidents last year (Q2:45)**

<b>Indication of accidents by respondents, n=50</b>	<b>Number of accidents in the last year</b>
Average number of accidents, per individual	1
Number of accidents indicated by 12 frail elderly	1
Number of accidents indicated by 17 frail elderly	2
Number of accidents indicated by 19 frail elderly	3
Most accidents mentioned by 2 respondents	5

The average number of accidents among the respondents during the previous year was one. Out of all, 50 respondents reported having had one (1) accident each during the previous year, 19 frail elderly had three (3) accidents each during the previous year, and 17 had experienced two accidents each during the previous 12 months. The highest incidence was five accidents each, mentioned by two frail persons (then it is not so repetitive)

The reasons for the accidents included the following:

**TABLE 4.18: Causes of accidents at home (Q2:47)**

<b>Causes of accidents</b>	<b>Frequency, n=50</b>	<b>Percentage, (%)</b>
Fall	45	90%
Fall due to slips	4	8%
Burns	1	2%

#### **4.15.2 Safety in the neighbourhood (Q2:48-49)**

Most of the frail elderly 93 (94.9%) indicated that they felt safe in the area where they lived. Only seven (n=98; 7.1%) indicated that they did not feel safe in their own neighbourhood. The reasons for this included: 1) Past burglaries; 2) high levels of crime; 3) frail elderly that consider themselves to be soft targets as they cannot



protect themselves; 4) “someone” entering their homes; 5) people being killed in their houses, and 6) no streetlights being available.

What validates this fearfulness even more is the fact that a fieldworker encountered the result of the high crime level at first hand. While collecting data in the Matwabeng community, she came across a house where a woman had just been criminally assaulted and killed in broad daylight, within sight of her children. The fieldworker saw the perpetrator run away and reported the case. This is a tragic indication of the real possibility of crime being committed against the most vulnerable persons in the community.

### 4.15.3 Feeling safe in own home (Q2:50-51)

Eight frail elderly mentioned that they did not feel safe in their homes in Matwabeng. They all provided reasons for this, summarised as follows:

**TABLE 4.19: Reasons why frail elderly do not feel safe at home (n=8)**

<b>Reasons: Feeling unsafe at home</b>	<b>Frequency, (n=8)</b>	<b>Percentage, (%)</b>
Burglaries	4	50%
Fear	2	25%
People killed & raped	1	12.5%
Alone at home	1	12.5%

The main reasons mentioned by four (50%) frail elderly about why they did not feel safe at home, was burglary and home break-ins. The questionnaire did not support exploring why they reported this, whether by personal experience or hearsay. Two respondents (25%) were fearful as they live alone, adding that they were easy targets for rape and/or murder.

In summary, the frail elderly of Matwabeng feel a need that the authorities address the internal and external threats to their safety and security.

## 4.16 ASSISTIVE DEVICES (Q2:52-56)

Analysis of the data proved that 31 (31.6%) of the frail elderly used assistive devices, while 67 (68.4%) did not utilize any such devices. The devices used included the following:

**TABLE 4.20: Assistive devices used by frail elderly**

Assistive device	Frequency, n=31	Percentage, (%)
Wooden / metal stick	14	45.1%
Walker	6	19.4%
Walking frame	6	19.4%
Crutches	4	12.9%
Wheelchair	1	3.2%

Most of the frail elderly (n=31; 45.1%) reported using a wooden or metal walking stick. Twenty-seven of the frail elderly mentioned that they could move around easily at home with their assistive devices. Only two reported that they could not move freely inside their homes as they were too old and frail, and the devices therefore did not provide much help to them.

### 4.16.1 Reasons for a lack of assistive devices for frail elderly who need them

The 9 respondents who mentioned a lack of assistive device provided the following reasons why they lack the equipment.

**TABLE 4.21: Reasons why frail elderly did not have assistive devices**

Reason why not have	Frequency n=9	Percentage, (%)
Financial	6	66.7%
No knowledge where to get one	1	11.1%
Will get one	2	22.2%

Six respondents (66.7%) mentioned financial reasons as motivation why they did not own assistive devices, despite being in need of them. Two respondents stated that

they aim to get assistive devices. However, these answers are incongruent with the question and might indicate that the question had not been fully understood.

#### 4.16.2 Adult nappies (Q2:58-59)

Only five (5.1%) of the frail elderly mentioned that they use adult nappies; 93 (94.9%) mentioned that they did not make use of them. Furthermore, those who admitted to utilizing adult nappies mentioned that one pack of 30 nappies per month was insufficient for everyday use. Normally a frail elderly would use four nappies per day (two in the day, and two at night). Unfortunately, respondents could only afford one pack per month (or one per day). Analysis of data collect about the activities of daily living during the first part of the questionnaire revealed that 62 of the identified 98 frail elderly answered “No” to Question 5, where respondents were asked whether they had good bladder and bowel control.

There may be various reasons for the observed discrepancy between the indicated need for, and the use of adult nappies. Firstly, could be financial, as the frail elderly might not be able to afford them, and secondly, they might not know about adult nappies. The third reason could be embarrassment due to incontinence.

#### 4.17 FINANCIAL MANAGEMENT (Q2:60-65)

Most of the frail elderly (n=74; 75.5%) mentioned that they manage their finances independently. The remaining 24 (24.5%) could not do so without help. The following persons assisted the elderly to manage their finances:

**TABLE 4.22: Assisting with financial matters**

Assisting with financial matters	Frequency, n=24	Percentage, (%)
Children	20	83.3%
Family members	4	16.7%

Of the frail elderly 95 (96.9%) were satisfied with how their finances were managed, while only three (3.0%) mentioned that they were not satisfied. Most of the frail

elderly (97.9%) received a monthly pension, while only one (1%) respondent mentioned that he / she did not receive a monthly payment as the children took the pension money. Two (2%) of the respondents reported that family members drew their money from the OTM for them, as they tended to forget where they hid it. The main monthly income for 96 elderly (97.9%) was a SASSA Government pension grant. Only two elderly (2%) receive a monthly private pension.

#### **4.18 OTHER NEEDS MENTIONED BY THE FRAIL ELDERLY (Q2:66)**

When respondents were asked what their needs were, some of the frail elderly added the following needs to those previously found:

- a) Respondents mentioned that they wanted identification documents. However, most of the respondents already receive a SASSA grant for which a valid ID document is required. This request might have more to do with Lesotho citizens living with the respondents - Keeping in mind that Matwabeng is very close to the Lesotho border.
- b) The respondents indicated that SASSA pension must increase. Although government sets financial policy, frail elderly can approach the DSD to enquire whether they were eligible for an Aid Grant of R460pm, payable to their caregivers. The researcher feels that referral to DSD for investigation of some / all of the study's respondent needs can be beneficial.
- c) All frail elderly has a constitutional right to safety. It seems that there is a need for knowledge, information and community awareness by the South African Police Service (SAPS) in Matwabeng.
- d) The respondents mentioned that some had further need of wheel chairs and crutches. These needs must be investigated further, and should be reported to authorities such as DOH, DSD and other NGOs. Donations of surplus or

redundant assistive devices from community organisations or NGOs that support the frail elderly are possible.

#### **4.19 SUMMARY**

In concluding this chapter, the researcher verified that all the respondents in the study were confirmed to be frail elderly, identified in Part One of the questionnaire develop form Katz ADL (Wallace & Shelkey, 2008:68; Shelkey & Wallace, 2012:2) and The Lawton IADL scale (Graf, 2008:56). Their data was collected by trained fieldworkers completing the first and the second parts of the questionnaire. Part Two assessed the needs of the frail elderly in more detail.

Where needed, the researcher trained, accommodated, and supported the fieldworkers.

Initially, the frail elderly in Matwabeng were distrustful of the field workers' motives. After accessing the community via the local radio station (Naledi FM) the trust toward the fieldworkers improved and the data collection could be completed without problem in the homes of the frail elderly. The researcher collected the completed questionnaires, captured the data on an Excel spread sheet before sending it to the Biostatistician in Bloemfontein for data analysis.

Although the frail elderly were found to be in need of care it seems that many prefer to stay in their homes in Matwabeng. With a background of 28 years' delivery of elderly care, the researcher could productively combine the research data with her own experience. There are some areas that need attention in order to deliver the goal of community home-based care to the frail elderly. These include:

Chapter Five will conclude this study by giving recommendations and the researcher's reflection on the study.

# **CHAPTER 5**

## ***Conclusion and recommendations***

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### **5.1 INTRODUCTION**

The findings of this research study are interpreted and discussed in this chapter. The discussion focuses on the following objectives of the study: To determine the extent of the population of frail elderly in Matwabeng and to determine the physical, socioeconomic health care needs of the frail elderly living at home. The two-part questionnaire that was used for data collection was based on Katz ADL (Addendum A) and the Lawton IADL scale (Addendum B). These scales are widely used in assessing the level of frailty in the elderly world-wide. The findings are compared with national and international studies on the aged and frail care persons. The discussion is linked to each objective of this study.

### **5.2 DETERMINE THE POPULATION OF THE FRAIL ELDERLY IN MATWABENG**

As described in Chapter 3 the field workers visited a total of 2505 houses, and identified 235 elderly persons, of whom 100 were identified as frail. Although this is not a definitive statistic, out of every 235 elderly persons there are 100 persons who are frail (42.6%). Obviously more research will be necessary to determine exact number of frail elderly in Matwabeng.

The frail elderly have physical and socio-economical health care needs that are not attended to (Dharamshi, 2014:427; Hoedemakers et al., 2019:1; Janse et al., 2016:1; Kelly et al., 2019:2; Looman et al., 2016:154). Although the Older Persons Act (Act 13 of 2006; DSD, 2019:1) promotes home care or support to the frail elderly in the community no progress has been made since 2004 (Froneman et al., 2004:423).

It was clear that this increasing ageing population places a greater burden for care on several resources. When taking the situation within the PHC, clinics this growing number of older people led to increased demands for nurses working with the elderly. This means that older persons visit local clinics with an increase in chronic medical conditions, while the current existing clinics are already overcrowded. This is what was experienced in Matwabeng while doing the research that only one clinic was available for a population of 25,543 (Statistics South Africa- Census, 2011). One local clinic has been closed down due to a shortage of personnel and the other clinic is closed due to structural problems (Van Zyl, 2020). What is more alarming, is that the only working clinic is 1,5 km further away adding to the distance that these people have to travel to get help.

Another burden on resources was indicated in the study that the main source of income for 98% (96) of the households was only a SASSA social grant. Only two per cent of the frail elderly received a private pension. As the Statistical summary of social grants in South Africa (2018), stipulates that the main source of income for most of the elderly in the Free State (81%) were a social grants. This is alarming as the dependency on social grant in South Africa is growing with the mentioned older population and makes the elderly population more dependent on social-economical resources in South Africa.

There are not enough resources to accommodate all the frail elderly in residential care facilities. Specialised services to the frail elderly need a new innovative plan as we cannot institutionalise all the frail elderly in residential facilities. This option is not economically sustainable and it seems as if the frail elderly prefer to remain in their own homes rather than go to a residential facility. Thus on a personal as well as an

economical level having and supporting the frail elderly to remain in the community is the most practical. An overview of the study includes the following.

The study aimed to determine the physical, socioeconomic and health care needs of the frail elderly living at home. The data was obtained through administering a questionnaire using fieldworkers. Said questionnaire explored their physical, socioeconomic and health care needs.

The following recommendations are made based on information described in Chapter 4. The researcher believes that the information will assist in addressing the care needs of the frail elderly at home.

### **5.3 CHRONIC DISEASES**

All the respondents indicated they suffered from chronic disease. The majority of the frail elderly 71% suffer from hypertension, followed by arthritis (58%), eye problems (49%) and diabetes 23%.

#### **5.3.1 Recommendation**

The management of chronic diseases is important as mismanagement of the treatment can have dire consequences. The researcher did not test the frail elderly's knowledge about their chronic diseases thus; their exact needs are not clear. However, the frail elderly is almost exclusively dependent on informal carers such as their children or neighbours. These individuals are in need of information and assistance with the management of the mentioned conditions.

Information and education is important to these informal carers of the frail elderly and can be done by the following manners:

- a) Information and education to the carers by the local clinics and NGOs,
- b) Information pamphlet's distributed in the community,
- c) Involvement and support from the local churches,



- d) The local Lesedi radio station can also help to broadcast information and training regarding elderly care and support to the people in the community. One must not underestimate the great impact that one interview had as describe in Chapter 1, radio Lesedi had by considers value tool for disseminating information,
- e) Residential facilities or NGOs can help with in-service training and information sessions to the informal volunteers in the community. Most of the residential facilities do have a volunteer program with outreach projects into the local communities. Training to the informal carers is very important so that they can assist in improving the mobility of the frail elderly at home. The occupational therapist can also assist the frail elderly with mobility problems and physical disability to improve their independence. One chronic condition mentioned was arthritis that was mentioned by 57% and can have an effect on the frail elderly mobility problems.

The chronic conditions will only increase and a two-pronged approach is recommended. Firstly, education and training for the available carers and secondly addressing the need for professional help to assist the frail elderly at home.

Being dependent on informal carers makes information and education important to both frail elderly and informal carers. It is indicated in this study that 75% of frail elderly need someone to help them with their medication at home. Keeping in mind that poor eye sight, arthritis, hypertension and diabetes mellitus increases with age, makes this objective very important. Further research will help to determine their knowledge and adherence to chronic medication by frail elderly.

Support to the carers is very important as found in the literature (Buckwalter & Davis, 2011:2; Bigala & Ayiga, 2014:463). Carers being overwhelmed by their responsibilities may result in elder abuse. It might be important to assist and support these carers by NGOs in day-care-services that can take place.

- i) Day-care services by NGOs or volunteers can help the working children to look after their frail elderly in the day when they work. Socialisation programmes and activities can form part of this day-care service program

weekly. A monthly fee payable by the children can be asked for this service which can include a meal in the day and stipend payable to the carer.

## **5.4 INFRASTRUCTURE**

Infrastructure in the study includes housing, water, sanitation and electricity at home.

### **5.4.1 Housing**

Most of the frail elderly 90 (91.8%) lived in brick houses only 8 (8.1%) lived in shacks in Matwabeng.

#### **5.4.1.1 Recommendation**

This indicates that housing development took place in Matwabeng and is a good sign of improvement regarding housing for the frail elderly. Although the study did not indicate if the houses were suitable for frail elderly 27 respondents indicate that they can move freely around in the houses.

### **5.4.2 Safety**

Looking at safety of the frail elderly 93% indicate that they feel safe in the area they live in and 94% mentioned that they feel safe in their own homes. This is a good indication.

### **5.4.3 Water**

All the houses did have flush toilets and indicate improvement. Water was available inside the homes to 35 (34%) frail elderly and outside water available to 65 (64%) frail elderly. As 64% do not have running water in their homes this makes it very difficult for the frail elderly. As 55% of the respondents mentioned that they do need help with bathing and 86% mentioned they cannot walk on their own. Unfortunately

the researcher did not investigate this problem and it is not known if they do need help due to the fact that water is mainly outside available to the frail elderly.

#### **5.4.3.1 Recommendation**

The Department of Human Settlements, water and sanitation's main function is to ensure water supply to the town, water were available. The municipalities function was to ensure water supply to each house. Water supply was available but the Setsoto municipality can look into the problem to ensure water are available inside each frail elderly's home, future develop and planning is necessary in Matwabeng to improve water supply inside the homes. This will help the frail elderly a lot. Maybe only a water pipeline is necessary to help the frail elderly.

#### **5.4.4 Sanitation**

It is indicated in the study that 64% of the frail elderly still have toilets outside their homes. This is problematic for the frail elderly who have difficulty walking as mentioned by 86%; on the other hand the respondents indicate that the bucket system toilets have been phased out in Matwabeng that helped the frail elderly.

##### **5.4. 4.1 Recommendation**

Future sanitary planning for better sanitation system inside the homes will help the frail elderly more. Department of Human Settlements, water and sanitation, and Setsoto municipality can help with this planning and improvement. Education, information and training to frail elderly on the workings and maintenance of toilets are necessary, as most of the frail elderly are only familiar with the bucket system.

#### **5.4.5 Electricity**

Almost all the respondents (99%) have access to electricity in their households. This is an important improvement by Eskom towards the frail elderly. Although load shedding happen more frequently in 2020 it is not known what the frail elderly do in

this circumstances because almost all of their utensils work with electricity as mentioned in the study. This can be researched further.

#### **5.4.5.1 Recommendations**

Electricity can be saved by using the following measures namely:

- a) Eskom can help with education programs for the frail elderly on how to save water and electricity.
- b) School projects by local high school children can promote their physical science skills by involving the frail elderly in their projects regarding using alternative energy.
- c) Information and education on using of other energy namely: using of sun energy to prepare meals and cost-effective solar system for elderly.

Future investment in rural areas is important for the frail elderly and need urgent attention. As mentioned increase the number of the frail elderly yearly and can future investment in this group of people make a huge economical difference. This can decrease the financial impact on all the resources if we can do this to maintain the frail elderly. To impact on the human rights and impact on the resources can be reduced if this can be achieved.

### **5.5 SUPPORT FOR ADL**

Support to the frail elderly includes ADL; help with medication managements and control, but also normal support in and around their homes. This support includes movement outside their homes, normal housekeeping tasks.

Most of the frail elderly lives with children and family members as they are the main support system in the community to the frail elderly, but these informal carers must be trained and educated how and where to do it. Twenty-seven frail elderly lives with four people and 22 mentioned they live with two people in the house. Only 20 of the respondents live alone. None of the respondents indicate that they want to stay with their children, but as indicated stay the children with them. Take into consideration

that the main income of the household for 98% of the frail elderly is only a SASSA social grant can this maybe the reason for the people staying with the frail elderly and share services. Children and family members help with ADL and managing of chronic diseases.

### **5.5.1 Recommendations**

Information and education is important to these informal carers of the frail elderly and can be done by the following manners:

- a) Information and education to the carers by the local clinics and NGOs,
- b) Information pamphlet's distributed in the community,
- c) Involvement and support from the local churches.
- d) The local Lesedi radio station can also help to broadcast information and training regarding elderly care and support to the people in the community.
- e) Residential facilities or NGOs can help with in-service training and information sessions to the informal volunteers in the community. Most of the residential facilities do have a volunteer program with outreach projects into the local communities. Important is that these training and support must be sustainable and implementable to the carers.

## **5.6 SOCIAL ISOLATION**

As mentioned by the support of carers can day-care-services help with this problem in the community. To prevent loneliness is respondents in social activities necessary for frail elderly. The study indicates that only 13 (13.3%) of the frail elderly participate in social activities and the two main reasons given by 85 (87%) of the frail elderly for not participating in social activities, were lack of mobility of the frail elderly and ignorance of the available programmes.

This study indicates that limited social activities and support are available to the frail elderly especially considering their challenges with mobility.

### **5.6.1 Recommendations**

Addressing social isolation will help to prevent loneliness. Lack of mobility can improve by referring frail elderly by the local clinic to the physiotherapist that can assist in this problem. Eighty-six percent of the respondents cannot walk on their own and 75% of the frail elderly mentioned that they need someone to help them at home as this can be a contributing factor to the poor attendance of social activities. Maybe NGOs and informal carers can look at social activities at home of the frail elderly. Bear in mind that 91% of the respondents needs formal care and no professional care was mentioned.

NGOs can help the frail elderly with activities and social programs that can be part of their community outreach programs to prevent loneliness. The churches can get more involved and help with elderly programs and social activities for the frail elderly to help prevent loneliness as 91.7% of the frail elderly participate in church activities.

Radio Lesedi can expand their broadcast information regarding social clubs and social activities for the frail elderly on a daily basis to make these services more known as 86% of the frail elderly listen to the radio and bear in mind the important role this radio station is playing in the community.

As mentioned above can day-care services for frail elderly help preventing this loneliness. Further research in social activities for frail elderly in a rural community is necessary.

## **5.7 FINANCIAL MANAGEMENT**

The purpose of this question was to see who assists the frail elderly with their financial matters and if they were satisfied with how the finances are managed. As elder abuse, neglect and exploitation are risk factors for frail elderly, financial abuse or misuse of frail elderly's money is part of elder abuse (Choi & Mayer, 2000:1). Although 83.3% of the respondents' children assist the frail elderly in their financial matters only one participant mentioned that her/his children take the pension money.

### **5.7.1 Recommendations**

If social isolation is addressed this will help to prevent loneliness and this will lead to frail elderly to have more contact with community members, this will help them to seek assistance when needed. This will make referrals to social worker easier, when exploitation, neglect or abuse cases of frail elderly are detected. Cases must be reported as stated by the Older Persons Act (13 Of 2006) to DSD, as this study indicates that cases of elderly abuse are not reported. Information and education in the community regarding abuse, neglect and exploitation of elderly are important. This can be done by handing out information pamphlets on abuse in the community, at the local schools, hospitals, local clinics and churches. School children at the local schools can help making pamphlets with this topic, they will feel more involved. The local Lesedi radio station can help broadcasting information regarding abuse and prevention talks. Social workers from DSD can visit the rural areas more frequently on a weekly basis, and not only monthly as current. Unfortunately DSD also has financial problems regarding staff payments and personal vacancies, personal talks with social worker of DSD. As mentioned before is all the social workers time currently going into case work and is services to the elderly neglected. It is important that the social workers made certain days only for elderly to help them with their social problems and needs.

## **5.8 RESIDENTIAL CARE**

Even though residential care does not seem to be the first choice for the elderly there might come a time when that is the only option available to them. In total indicate 25 (25.5%) frail elderly that they want to stay in a residential facility to receive frail care. The majority of the frail elderly 72 (73.5%) prefer to stay at home and not enter an institution because they remarked that they like known surroundings and love their home. This is fortuitous because it is most economical. However to assist these people to stay at home for as long as possible the following aspects need to be addressed. They have been divided in to 3 groups: infrastructure, services and specific devices.

### **5.8.1 Recommendations**

As indicated is residential care not a sustainable option due to costing. DSD must take this into consideration when compiling their budget that some frail elderly indicates that there is a need for residential care but cannot financially afford this option, only with the help of DSD. Currently, there are government residential facilities that are free for the elderly, but there is also a shortage as some frail elderly cannot go to the facilities due to space issues. Many elderly people, with limited financial resources, cannot afford privately-owned care facilities. The government should therefore consider fully subsidising these frail elderly people whose only alternative is to move to privately owned care facilities.

There is a need for future research to do a costing model between home base care and residential care. The researcher opinion is that there is a need and place for residential care and that this option can only be considered when all attempts have failed to keep the frail elderly at home.

## **5.9 HOME BASE CARE**

The study indicates that home base care is not available for the frail elderly in the community of Matwabeng. Frail care is mostly delivered by informal carers namely children (48.7%), family member (26.7%) and neighbours (10.7%). Most of the respondents 55 (6%) need someone to help them bath/shower or to wash themselves. Seventy-seven (8%) of the frail elderly need someone to help them at home.

Home base care can also include activities at home that the frail elderly need help with namely: Washing clothes needed by 86 (8%) respondents, ironing clothes needed by 84 (8%) frail elderly and cleaning their house by 83 (6%) respondents. Frail elderly indicate that they need also help in preparing and cook of meals by 68



(7%) and help with gardening by 81 (83%) respondents. This indicates that frail elderly want to stay at home but need help and support to do it.

Currently the local clinics use community health workers but their primary function is only to collect information where problems are and to give it through to the primary health care clinics. It is unknown how many of these reports are followed up.

### **5.9.1 Recommendations**

Since 2001 there is a National guideline on home-base care and community based care, but this guideline are not develop up to date or funded by DOH or DSD. Stakeholders can help the different government departments with this goals and objectives with the main aim to empower the frail elderly, informal carers and the community. NGOs can help with these goals by providing home base care services and/or meals on wheels for the frail elderly when needed at home. Funding of this program is essential by the different governmental departments; one can also look for funding outside Matwabeng for this project. It is necessary for the Department of Social Development (DSD) to write the goals and objectives for home base care into the service specifications for older persons. As proper implementation of home-based care and community services can save a lot of money for the government as frail elderly does not need to be admitted to hospitals and care facilities (Tshesebe & Strydom, 2016:10).

One can even involve different stakeholders to help with these projects in the community namely: a) Different banks can help with financial information and advice, b) dieticians' from DOH can empower the community regarding nutritional needs and problems c) woman leagues and church ladies can give training about personal hygiene, social activities in the community. In practice, people can be educated about good health before they even reach old age in order to ensure that they lead healthy lives which will subsequently ease their transition into old age. Leading healthy lives from an early age can help them to prevent many chronic diseases that are associated with old age and contribute towards frailty with dependence.

## **5.10 NUTRITIONAL STATUS**

The following dependency was noted by the respondents in the study: 83 (85%) of the frail elderly cannot do their own shopping and 70 (72%) need assistance because

88 (90%) of them cannot walk on their own or climb steps as indicated. It was not investigated if the need for assistance of the frail elderly has an effect on their nutritional status.

### **5.10.1 Recommendations**

Considering that the distance to town from Matwabeng to Senekal is 6km, the Department of Transport can help the frail elderly by providing affordable transport for them as they do for the school children. This suggestion can help to make the elderly more independent. Radio Lesedi can help with educational broadcast regarding nutrition and a healthy life style. This can include information sessions on healthy food and food that is not healthy.

## **5.11 LOCAL CLINICS**

The percentage of frail elderly making use and depends on the local clinics for health care services were 84 (85.7%) while 14 (14.3%) frail elderly did not make use of the local clinics. The reason mentioned not using local clinics was mostly because the frail elderly cannot walk. Some frail elderly mentioned that the queues are too long as a reason why they did not use the local clinic and some of them mentioned that they do not like the local clinic. This was also mentioned in the study of Peltzer and Phaswana-Mafuya (2012:3) that indicate that there is an increase in the percentage adults who indicate dissatisfaction with all types of health services and include the following as reasons, long waiting times, staff attitudes, and non-availability of prescribed medication and staff shortages. Further research is necessary why the frail elderly do not use the local clinics. Census can also be done regarding the effectiveness of the local clinics.

### **5.11.1 Recommendations**

Dedicated time slots for the elderly to get priority. The DOH can assist the frail elderly who have difficulty walking with mobile clinics nearer to them even if it is only once a month. Regular medical check-ups is important and must be given on primary level as 71% of the frail elderly have hypertension and need to be controlled and respondents with diabetes mellitus was 23%. The movement towards an easier issuing of chronic medication is important for the DOH where the local clinics already started with centralised chronic medicine dispensing & distribution (CCMDD) for the frail elderly to collect their chronic medication at the local clinics or Senekal pharmacy. This chronic prescription is valid for 6months. This new movement will already help the frail elderly in Matwabeng taking into consideration that 33 (34%) respondents mentioned they need help taking their medication and 41 (42%) indicate that they cannot take own medication correct and on time.

### **5.12 MULTI-PROFESSIONAL TEAM IMPORTANCE**

A multi-professional team looking at the frail elderly's health is to enhance and improve geriatric care in a rural area. This team normally consist of a medical doctor, registered nurse, occupational therapist, physiotherapist and dietician. It is not known if all of these professional members are regular available to the frail elderly in Matwabeng. The respondents mentioned that regular medical visits are important to 81, 63% of them at the local clinics; although one frail elderly mentioned that he/she visits a private doctor and only one visit the doctor when they are sick. It can also help the frail elderly if the Pelophepa train visits the rural communities more frequently.

### **5.13 EYE PROBLEMS**

Eye problems was mentioned by 49% of the frail elderly as a chronic condition, 21.7% of the respondents mentioned it as a medical condition and 15 (15%) respondents indicate it as a disability.

### **5.13.1 Recommendations**

The local clinics can help the frail elderly to contact the Department of Ophthalmology at the National District Hospital in Bloemfontein to contact them for an outreach to do a spectacle drive and eye test in the rural area of Matwabeng. It was not indicated when last did they had their eyes tested. The Pelophepa train can also assist with this.

It is indicated that the health system and primary care systems are not well designed for older people who have different chronic deceases and complex chronic multi-system problems (Kelly et al., 2019:1). Training to informal carers can also include working and maintenance of assistive devices.

## **5.14 ASSISTIVE DEVICES**

The need for assistive devices is important as indicated by 30 (30%) respondents that they use these devices. These devices increase the frail elderly's independence. The preferred assistive devices used were wooden or metal sticks to walk with. One must keep in mind that 63 (64%) of the frail elderly need help with activities and 88 (90%) respondents indicate that they cannot walk on their own or climb steps. The main reason mentioned was financial reasons why more frail elderly did not use assistive devices. This can maybe be the main reason why only wooden or metal sticks were mentioned and only one used a wheelchair. Other needs mentioned by the frail elderly were the need for wheelchairs.

### **5.14.1 Recommendation**

It is the opinion of the researcher that the percentage of use of assistive devices and can increase if these devices were more freely available to the frail elderly. Maybe the Department of Health can assist the frail elderly and get more donations for

assistive devices. Lending depot for assistive devices is important where people can donate these devices to use by the frail elderly in the community. Currently the residential facility in Senekal does have a lending depot for assistive devices to the community members, but the need is too big to help everybody. Possibly the catchment area for the rural areas can be expanded and a province wide drive for assistive devices and be launched. This indicates that there is a need for assistive devices. Further research is necessary in this field.

## **5.15 ADULT NAPPIES**

Frail elderly indicated that 62 (63%) of them do not have good bladder control while only 5% mentioned that they use adult nappies. The reason for this was mentioned namely financial.

### **5.15.1 Recommendation**

The researcher is of the opinion that, if more funds are available, more frail elderly will make use of adult nappies.

Every research project has its limitations. There were some limitations identified in the study and will be discussed in the following section.

## **5.16 LIMITATIONS OF THE STUDY**

Errors in the study were indicated by the researcher in Chapter 4.

Although the study succeeded in answering its research question, there are limitations associated with its findings, and any gaps that remain should be considered in the future. The researcher thinks that some of the questions were not understood by the respondents and was mentioned in Chapter 4. As mentioned were no statistics available on the frail elderly, that made this research very challenging. This indicates that this study was very valuable.

## **5.17 VALUE OF THE STUDY**

As one grows older, the population depend more on care due to frailty. There is little knowledge in the gerontology field concerning the needs of the frail elderly. This study can help with future research suggestions on frail elderly and elderly care. The research findings can help to give information to future stakeholders in the government sector on what the frail elderly need and what the shortfall is for future policies and elderly programs. The frail elderly indicated that 73 (72%) of them want to stay at home but do not have anybody to care for them at home. A growing elderly population can help future planning in the industry to cater for a group of people that can invest and spend their money in.

Government should consider the plight of older people and budget appropriate money towards the care of elderly people. They must also improve service delivery to frail elderly in terms of resources and manpower. The following recommendations are important.

## **5.18 RECOMMENDATIONS FOR FUTURE RESEARCH**

This study sets the stage for further research on frail elderly in frail care. Further research can give value to the neglected field in gerontology, to motivate registered nurses to focus on frail care and develop home base care for frail elderly in communities.

The other prominent gap in knowledge that this study identified relates to community care for frail elderly, social activities, financial education, use and importance of assistive devices and need for adult nappies.

Starting this research journey since 2017 each year different needs arise for the frail elderly Worldwide. Never did we thought that a virus such as a coronavirus exist and will put the whole World in lock down. This indicates the necessity of research as the researchers currently is looking for a cure against the coronavirus also known as

COVID19. The researcher concluded that future research on frail care is essential and necessary.

Feedback can be given about the costing model, as in the High Court Judgement of 28 August 2014 (Nawongo v MEC. SA, 2014:1719) by the judgement delivered on 22 May 2020 (Nawongo v MEC.SA, 2019:1381) that the Department failed to develop the 2014 policy or to formulate another policy for payment of social services to welfare organizations in the Free State and did not set clear targets to achieve the set objectives for older and vulnerable persons. The Departments was directed to pay the costs of the application. With this ruling the High Court forced the Department of Social Development to develop a financial policy that is consistent with the Constitution of South Africa for older and vulnerable persons.

This indicates that the DSD must plan and develop a new financial policy for payment of services towards the elderly.

## **5.19 SUMMARY**

In this chapter, recommendations for implementers, policy-makers and further research were given. The recommendations are based on the findings (strategies) of the study. The limitations of the study were also identified and the gaps that remain were mentioned. The researcher believes that, if these recommendations could be considered, care to the frail elderly could be improved.

The researcher also reflected on her learning experience since 1984 as well the personal experience she gained throughout the whole research process. This was one learning experience never to be forgotten.

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## ***ADDENDUM A***

### ***Katz Index of Independence in ADL***



## Katz Index of Independence in Activities of Daily Living

ACTIVITIES POINTS (1 OR 0)	INDEPENDENCE: (1 POINT) NO supervision, direction or personal assistance	DEPENDENCE: (0 POINTS) WITH supervision, direction, personal assistance or total care
<b>BATHING</b>  POINTS: _____	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) Needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.
<b>DRESSING</b>  POINTS: _____	(1 POINT) Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
<b>TOILETING</b>  POINTS: _____	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
<b>TRANSFERRING</b>  POINTS: _____	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transferring aides are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
<b>CONTINENCE</b>  POINTS: _____	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder.
<b>FEEDING</b>  POINTS: _____	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.

TOTAL POINTS = \_\_\_\_\_ 6 = High (patient independent) 0 = Low (patient very dependent)

Slightly adapted from Katz, S., Down, T.D., Cash, H.R., & Grotz, R.C. (1970) Progress in the development of the index of ADL. *The Gerontologist*, 10(1), 20-30.

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The Hartford Institute for Geriatric Nursing recognizes Mary Shelkey, PhD, ARNP and Meredith Wallace Kazer, PhD, APRN, A/GNP-BC as the original authors of this issue.

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## ***ADDENDUM B***

### ***The Lawton Instrumental Activities of Daily Living scale***

## The Lawton Instrumental Activities of Daily Living Scale

### A. Ability to Use Telephone

1. Operates telephone on own initiative; looks up and dials numbers..... 1
2. Dials a few well-known numbers..... 1
3. Answers telephone, but does not dial..... 1
4. Does not use telephone at all..... 0

### B. Shopping

1. Takes care of all shopping needs independently ..... 1
2. Shops independently for small purchases..... 0
3. Needs to be accompanied on any shopping trip ..... 0
4. Completely unable to shop ..... 0

### C. Food Preparation

1. Plans, prepares, and serves adequate meals independently..... 1
2. Prepares adequate meals if supplied with ingredients..... 0
3. Heats and serves prepared meals or prepares meals but does not maintain adequate diet..... 0
4. Needs to have meals prepared and served..... 0

### D. Housekeeping

1. Maintains house alone with occasion assistance (heavy work)..... 1
2. Performs light daily tasks such as dishwashing, bed making..... 1
3. Performs light daily tasks, but cannot maintain acceptable level of cleanliness ..... 1
4. Needs help with all home maintenance tasks..... 1
5. Does not participate in any housekeeping tasks..... 0

### E. Laundry

1. Does personal laundry completely ..... 1
2. Launders small items, rinses socks, stockings, etc..... 1
3. All laundry must be done by others ..... 0

### F. Mode of Transportation

1. Travels independently on public transportation or drives own car..... 1
2. Arranges own travel via taxi, but does not otherwise use public transportation ..... 1
3. Travels on public transportation when assisted or accompanied by another ..... 1
4. Travel limited to taxi or automobile with assistance of another..... 0
5. Does not travel at all ..... 0

### G. Responsibility for Own Medications

1. Is responsible for taking medication in correct dosages at correct time..... 1
2. Takes responsibility if medication is prepared in advance in separate dosages..... 0
3. Is not capable of dispensing own medication ..... 0

### H. Ability to Handle Finances

1. Manages financial matters independently (budgets, writes checks, pays rent and bills, goes to bank); collects and keeps track of income..... 1
2. Manages day-to-day purchases, but needs help with banking, major purchases, etc ..... 1
3. Incapable of handling money ..... 0

**Scoring:** For each category, circle the item description that most closely resembles the client's highest functional level (either 0 or 1).

Lawton, M.P., & Brody, E.M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. *The Gerontologist*, 9(3), 179-186.

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CLINICAL NURSING WEBSITE: www.ConsultGerIRN.org

***ADDENDUM C***

***Ithuseng Service Club consent***

Ithuseng Service Club

P.O. Box 384

SENEKAL

9600

06 – 12 – 2017

Ithuseng Service Club committee hereby give informed consent to Me Elizabeth C. Nieuwenhuis  
ID: 651001 0027 086 to do the pilot study on members of the Service Club as part of her  
Reaserch Study at U.F.S.

Thanks

Chairlady: *M. M. S. S.*

Vice Chair: *M. M. S. S.*

***ADDENDUM D***

***Consent Form***

## Consent Form

I have had the study explained to me. I have understood all that has been read and had my questions answered satisfactorily.

**Yes (please tick) I agree to be part of the research as described.**

Name of frail elderly: \_\_\_\_\_

I understand that I can change my mind at any stage and it will not affect anyone connected to the frail elderly in any way.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

(Please print name)



☒ Ds Olivierstraat/ Road, Senekal ☒ Ds Olivierstraat/ Road, Senekal, 9600  
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# ***ADDENDUM E***

## ***Part One of Questionnaire (English)***



**QUESTIONNAIRE (PART 1) DETERMINE FRAIL ELDERLY?**

**Instructions**

Mark the appropriate block with a X or write your answer on the space provided.

--	--	--	--

**BACK GROUND INFORMATION**

1 Date questionnaire is completed (dd/mm/yy) ...../...../.....

2 What is your gender?

Male(1)	Female(2)
---------	-----------

3 What is your birthdate? (dd/mm/yy) ...../...../.....

4 What was your occupation? .....

5 What is your highest qualification?

1	No Schooling
2	Primary school
3	Secondary school
4	Diploma/Degree
5	Other (Specify) .....


6 What is your marital status?

1	Single
2	Married/Traditional marriage
3	Divorced/Separated
4	Widow/Widower
5	Living together


7 What is your home language?

1	Afrikaans
2	English
3	Sesotho
4	Zulu
5	Other,specify.....


8 Which of the following chronic diseases do you have?

1	Diabetic
2	High blood pressure
3	Low blood pressure
4	Colesterol
5	Epilepsy
6	TB
7	Eye problems
8	Arthritis
9	Lung diseases, specify .....
10	Other, specify .....


9 Do you have any disabilities?

YES (1)	NO (2)
---------	--------

10 If YES name the disabilities you have?

.....

11 Which activities can you do on your own?

1	Can you bath/shower and wash yourself on your own?
---	--

- YES (1) NO (2)
- 2 Can use toilette on your own/climb on and of toilet or commode self?  
YES (1) NO (2)
- 3 Can you dress yourself / upper and lower parts?  
YES (1) NO (2)
- 4 Can you climb in/out of bed by yourself?  
YES (1) NO (2)
- 5 Do you have good self control over bladder and bowel functions  
YES (1) NO (2)
- 6 Can you prepare your own meals daily independently  
YES (1) NO (2)
- 7 Can you take your own medication daily correct and on time?  
YES (1) NO (2)
- 8 Can you do your own shopping in town?  
YES (1) NO (2)
- 9 Can you walk on you own or climb steps?  
YES (1) NO (2)
- 10 Can you prepare and cook your own meals daily?  
YES (1) NO (2)

TOTAL NO  
QUESTIONS  
NUMBER 11

IF ANSWERED MORE THAN TWO QUESTIONS "NO" IN QUESTION 11  
COMPLETE SECOND PART OF QUESTIONNAIRE

***ADDENDUM F***

***Part Two of Questionnaire  
(English)***

**QUESTIONNAIRE (PART 2) TO DETERMINE CARE NEEDS OF THE FRAIL?**

**Instructions**

Mark the appropriate block with a X or write your answer on the space provided.

For Office Use

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**GENERAL INFORMATION**

1 What kind of house do you live in?

- |   |              |
|---|--------------|
| 1 | Flat         |
| 2 | Hostel       |
| 3 | Schack       |
| 4 | Brick house  |
| 5 | Other: ..... |

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

2 Who owns the house you live in?

.....

<input type="checkbox"/>
--------------------------

3 How many bedrooms do the house have?

.....

<input type="checkbox"/>
--------------------------

4 How many people live in the house with you?

.....

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5 What is the main source of income in the house?

.....

<input type="checkbox"/>
--------------------------

6 Do you have a toilet in the house?

YES (1)	NO (2)
---------	--------

<input type="checkbox"/>
--------------------------

7 Where is the toilet situated?

INSIDE (1)	OUTSIDE (2)
------------	-------------

<input type="checkbox"/>
--------------------------

8 What type of toilet do you use?

- |   |                      |
|---|----------------------|
| 1 | Flush toilet         |
| 2 | Pit                  |
| 3 | Bucket               |
| 4 | Commode              |
| 5 | Other, specify ..... |

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

9 Is there a place to prepare your meals?

YES (1)	NO (2)
---------	--------

<input type="checkbox"/>
--------------------------

10 Do your house have electricity?

YES (1)	NO (2)
---------	--------

<input type="checkbox"/>
--------------------------

11 What fuel is used for cooking of your meals most of the time?

- |   |                      |
|---|----------------------|
| 1 | Electricity          |
| 2 | Gas                  |
| 3 | Paraffin             |
| 4 | Wood,coal            |
| 5 | Other, specify ..... |

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

12 Where does u get your water from?

- |   |                       |
|---|-----------------------|
| 1 | Tap inside the house  |
| 2 | Tap outside the house |
| 3 | Communal tap          |
| 4 | River                 |
| 5 | Well, Borehole        |

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

6 Other, specify .....

13 What is the distance to the tap, if not inside?

..... meters

14 Do you have access to the following working items?

	1	2
Stove(Gas, coal, electric)	YES	NO
Primus/Paraffin stove	YES	NO
Microwave	YES	NO
Refrigerator/Freezer	YES	NO
Television	YES	NO
Radio	YES	NO
Computer	YES	NO
Cellphone	YES	NO

15 How do you get to shops, clinic or church?

- 1 Needs assistance on any shopping trip
- 2 Shops independently for small purchases
- 3 Independently, take care of all shoppings needs
- 4 Completely unable to shop
- 5 Other, specify .....

**INVESTIGATE THE NEED**

16 In which of the following activities do you need assistance?

- 1 Bath/Shower or washing self
- 2 Use of toilet and/or to get on and off toilet
- 3 To dress yourself upper and lower parts
- 4 Help to climb in or out of bed
- 5 Help with bladder and bowel functions
- 6 Help preparing meals daily
- 7 Help to take own medication daily in correct dosages and on time
- 8 None mentioned

17 Do you need someone to help you at home?

YES (1)  NO (2)

18 If YES motivate your answer.

.....

19 Who help and care for you at home?

- 1 Children
- 2 Family members
- 3 Home Base Carers
- 4 Neighbours
- 5 Volunteers
- 6 Nobody
- 7 Other specify .....

20 If you do need help at home and nobody helps you, why not?

.....

21 Do you need help in the following activities at home?  
(Mark all the appropriate options)

	1	2
Washing clothes	YES	NO
Ironing clothes	YES	NO
Prepare and cook meals	YES	NO
Cleaning the house	YES	NO
Gardening	YES	NO
Shopping independently	YES	NO
Personal Hygiene	YES	NO

22 Do you have someone to help you with above mentioned activities at home?

YES (1) NO (2)

23 If NO why not?

.....

24 Do you participate in any social activities?

YES (1) NO (2)

25 If YES which social activities do you participate in?

.....

26 If NO why not?

.....

27 Do you know of any frail care services in the community?

YES (1) NO (2) Don't know (3)

28 Are frailcare services available in your community?

YES (1) NO (2) Don't know (3)

29 If YES who deliver these services?

.....

30 Do you make use of these services?

YES (1) NO (2)

31 Do you make use of the local clinics

YES (1) NO (2)

32 If NO why not?

.....

33 Where do you want to stay mostly?

AT HOME (1) OLD AGE HOME (2) CHILDREN (3) OTHER (4)

34 Motivate your choice/answer.

.....

35 Do you have a medical condition where you depend on someone for assistance?

YES (1) NO (2)

36 If YES name the medical condition

.....

37 Who help you with the medical condition?

- 1 Children
- 2 Family members
- 3 Home Base Carers
- 4 Neighbours
- 5 Volunteers
- 6 Nobody
- 7 Other, specify .....

38 Do you regular went for medical check ups?

YES (1) NO (2)

39 If NO why not?

.....

**NUTRITION STATUS**

40 Do you think you eat enough food per day?

YES (1) NO (2)

41 If NO explain your answer

.....

42 How much do you spend on food per month?

.....

43 Explain the difference between healthy and unhealthy food

.....

44 Give one example of healthy and unhealthy food.

.....

**SAFETY AT HOME**

45 Did you have an accident in the past year, slipped or fell?

YES (1) NO (2)

46 How many accidents in the last year?

.....

47 If YES, what happened?

1	Fall
2	Fall due to slip
3	Burn myself
4	Assault
5	Other, specify .....

48 Do you feel safe in the area you are living?

YES(1) NO(2)

49 If NO why is it not safe?

.....

50 Do you feel safe in your home?

YES(1) NO(2)

51 If NO why not?

.....

**ASSISTIVE DEVICES**

52 Do you make use of assistive devises?

YES (1) NO (2)

53 If YES which assistive devices do you use?

- 1 Wheel chair
- 2 Walker
- 3 Walking frame
- 4 Crutches
- 5 Walking wooden/metal stick
- 6 Commode
- 7 Hearing aid
- 8 Other specify .....


54 Can you move around easily with these devices

YES (1)	NO (2)
---------	--------

55 If NO what is the reason?

.....

56 If you do need assistive devices and don't have why not?

- 1 Financial
- 2 No knowledge where to get
- 3 Do not know how to use
- 4 Other, specify .....


57 Do you use adult nappies?

YES(1)	NO(2)
--------	-------

58 If YES are the nappies enough for everyday use?

YES (1)	NO (2)
---------	--------

59 If NO why not?

- 1 Financial
- 2 No knowledge where to get
- 3 Cannot go and buy the nappies
- 4 Other, specify .....


**FINANCIAL MANAGEMENT**

60 Do you manage your financial matters independently?

YES (1)	NO (2)
---------	--------

61 If NO who assist you with your finances?

- 1 Children
- 2 Family members
- 3 Home Base Care
- 4 Neighbours
- 5 Volunteers
- 6 Other specify .....


62 Are you satisfied with how your finances are managed?

YES (1)	NO (2)
---------	--------

63 Do you receive your monthly payment?

YES(1)	NO(2)
--------	-------

64 If NO state the problems.

.....

65 Where do you receive a monthly pension from?



1	SASSA
2	PRIVATE
3	NONE
4	OTHER

Specify .....

66 Any other need you would like to mention?

.....

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

# ***ADDENDUM G***

## ***Information Sheet***

## Information Sheet

### Care needs of the frail elderly at home in Matwabeng

<b>Researcher:</b>	<b>Bets (EC) Nieuwenhuis SENEKAL</b>
<b>Contact detail:</b>	<b>Cell: 082 925 9387</b>

I, Bets (EC) Nieuwenhuis am doing my research to determine the care needs of the frail elderly at home in Matwabeng. The research conducted is for a Master's degree in Nursing Science.

#### What is this research about?

There is little information about the care needs of frail elderly in a community. In this research study I want to determine what the care needs of the frail elderly are in Matwabeng. All research at the University of the Free State, Faculty of Health Sciences has to be approved before it begins, by the Health Sciences Research Ethics Committee. This committee makes sure that the research is important, and that participants' safety and rights are respected.

The research study is done by asking questions to the frail elderly in their homes and completing a questionnaire about their care needs in Matwabeng. I would like to involve all the frail elderly in Matwabeng.

#### Why do I want to talk to you and what does it involve?

Because the researcher is doing outreach programs in the community of Matwabeng she decided to focus on the frail elderly in Matwabeng and want to involve all the frail elderly in Matwabeng and there is no specific reason other than that the frail elderly live in Matwabeng.

The frail elderly's name and surname will not be attached to any specific questionnaire so the information

**Are there any risks or benefits to the frail elderly?**

The questionnaire should not take longer than 30 minutes per frail elderly and I do not foresee any risks for participating in this research. The questionnaire holds no risk in to the frail elderly and will not do harm.

There are no benefits to taking part and there will be no payment to the frail elderly. The only benefit is that I want to determine what the care needs of the frail elderly are and this can help future research and information for policies about frail elderly's needs.

**Who will have access to the information the frail elderly gives?**

No information about the frail elderly or other participants will be sheared with anyone beyond the people who are closely concerned with the research. All the documents are stored securely in locked cabinets and on password protected computers where applicable.

The knowledge gained from this research will be combined and may be published in research journals or presented at conferences. Again no frail elderly will be linked to any of the data.

**What will happen if the frail elderly refuses to participate?**

All participation in research is voluntary. The frail elderly are free to decide if they want to take part or not. If you refuse participation there will be no penalties. If you do agree you can still change your mind at any time without any penalties.

**What if I have any questions?**

You are free to ask me, Bets Nieuwenhuis any question about this research. If you have any further questions about the study, you are free to contact the researcher using the contacts below:

Bets (EC) Nieuwenhuis      0829259387      ssvb@webmail.co.za

**If you have any complaints or concerns you are welcome to contact the Chairperson of the Health Sciences Research Ethics committee at:**

The Chairperson: Health Sciences Research Ethics Committee (HSREC)  
For Attention: Mrs MGE Marais  
Block D, Room 104,  
Francois Retief Building  
PO Box 339 (G40)  
Nelson Mandela Drive  
Faculty of Health Sciences  
University of the Free State  
Bloemfontein  
9300  
Tel: +27 51 401 7794 or 27 51 444 4359

***ADDENDUM H***

***HSREC Approval***



Health Sciences Research Ethics Committee

26-Nov-2018

Dear **Mrs Elizabeth Nieuwenhuis**

Ethics Clearance: **Care needs of the frail elderly at home in Matwabeng**

Principal Investigator: **Mrs Elizabeth Nieuwenhuis**

Department: **School of Nursing Department (Bloemfontein Campus)**

**APPLICATION APPROVED**

Please ensure that you read the whole document

With reference to your application for ethical clearance with the Faculty of Health Sciences, I am pleased to inform you on behalf of the Health Sciences Research Ethics Committee that you have been granted ethical clearance for your project.

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2018/1092/2711**

The ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the HSREC for approval to ensure we are kept up to date with your progress and any ethical implications that may arise. This includes any serious adverse events and/or termination of the study.

A progress report should be submitted within one year of approval, and annually for long term studies. A final report should be submitted at the completion of the study.

The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act, No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

For any questions or concerns, please feel free to contact HSREC Administration: 051-4017794/5 or email [EthicsFHS@ufs.ac.za](mailto:EthicsFHS@ufs.ac.za).

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

Yours Sincerely

Dr. SM Le Grange  
Chair : Health Sciences Research Ethics Committee

Health Sciences Research Ethics Committee

Office of the Dean: Health Sciences

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# ***ADDENDUM I***

## ***Part One of Questionnaire (Sesotho)***

**DIPOSO TSA PELE (1) HO KGETHOLLA BATHO BA HOLOFETSENG BA HODILE**

**Ditaelo**

Tshwaya lebokose le nphahetseng ka X kapa ngola karabo seabakeng se o se fuweng

**TLHAISOLESERING KA WENA**

- 1 Letsata leo dipotso di tshwileweng (dd/mm/yy) ... / ... / ...
- 2 Bong ba hao?
 

Monna(1)	Mosadi(2)
----------	-----------
- 3 Letsata le hao la ts'walo ke lefe? (dd/mm/yy) ... / ... / ...
- 4 O sebetse mosebetsi ofe? .....
- 5 Ke mangolo afe a thuto e phahameng onang le ona? .....

1	Ha ke ya kena Sekolo
2	Sekolo sa ho gale
3	Sekolo se mahaheng
4	Diploma/Degree
5	Ho hong (Hlaloa)

- 6 Boemo ba lena ba lenyalo?
 

1	Ha wa nyala/nyalwa
2	O nyetse / Nyetse
3	Le hlalane / le arohane
4	O morilokhaci
5	Le dula mmoho
- 7 Puo ya lepeng?
 

1	Afrikaans
2	English
3	Seotch
4	Zulu
5	Enngwa-hlaloa
- 8 Bolela malwetse a sa phahameng onang le ona.
 

1	Lefu la tswekere
2	Kgatele ya madi e phahameng
3	Kgatele etlase ya madi
4	Kholestotole
5	Lefu la sedhwathwa
6	IB
7	Botlata ba mahlo
8	Ramatki
9	Lefu la mashwato
10	Ho hong (Hlaloa)
- 9 Bolela bochwale bo onang le bona.
 

EYA (1)	THE (2)
---------	---------
- 10 Ebang ore oya, Bolela bochwale bo onang le bona?
 

EYA (1)	THE (2)
---------	---------
- 11 Ke dintho tse feng tseo o kgonang ho iketsetsa tsona?
 

1	O kgonang ho ilhlatywa?
EYA (1)	THE (2)
2	Ho kisa nllwaneng

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d	d	m	m	y	y		



EYA (1) TJHE (2)

3 Ho ikapesa mmeleng.

EYA (1) TJHE (2)

4 Ho hlwa le ho theoha bethe?

EYA (1) TJHE (2)

5 O kgona ho laola senya kapa ho ithoma.

EYA (1) TJHE (2)

6 Ho iketsetsa dijo.

EYA (1) TJHE (2)

7 Ho nwa moriana wo hao ka nako.

EYA (1) TJHE (2)

8 O kgona ho ikisa mabenkeleng?

EYA (1) TJHE (2)

9 O kgona ho tsamaya ka bo wena kapa ho palama disteps?

EYA (1) TJHE (2)

10 O kgona ho pheha dijo?

EYA (1) TJHE (2)

EBANG O ARABILE KA "TJHE" HO POTSO YA 11

ARABA DIPOTSO TSA KAROLO YA BOBEDI (2)

PALO YA DIPOTSO  
TSE O ARABILENG  
"TJHE" KAOFELA

## ***ADDENDUM J***

***Part Two of Questionnaire  
Assesses the Needs (Sesotho)***

**DIPOTSO TSA PELE ( Karolo ya 2)**

**Ditaelo**

**Tshwaya lebokose le nphahetseng ka X kapa ngola karabo sebakeng se o se fuweng**

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**TLHAISO LESEDING KA KAKARETSO**

1 O dula ntlong ya mofuta ofe?

- |   |                |
|---|----------------|
| 1 | Folete         |
| 2 | Hosetele       |
| 3 | Mokhukhu       |
| 4 | Ntlo ya setene |
| 5 | Ha hong? ..... |


2 Ke ntlo ya mang eo?

.....

--

3 Ntlo eo ena le kamore tse kae tsa ho robala?

.....

--

4 Ke batho ba bakae ba dulang le wena moo?

.....

--

5 Ke mohlodi ofe o moholo wa lekeno la tjelete?

.....

--

6 Na ona le ntlwana ka tlung?

EYA (1) | TJHE (2)

--

7 Ntlwana e hailwe kae?

KA TLUNG (1) | KA NTLE (2)

--

8 Ke ntlwana ya mofuta ofe?

- |   |                        |
|---|------------------------|
| 1 | Ntlwana e folashang    |
| 2 | Mokoti                 |
| 3 | Lebakete               |
| 4 | Pitsana                |
| 5 | Ho hong (Bolela) ..... |


9 Na hona le sebaka sa ho lokisa dijo?

EYA (1) | TJHE (2)

--

10 Na hona le motlakase ka tlung?

EYA (1) | TJHE (2)

--

11 Le sebedisa eng ho pheha?

- |   |           |
|---|-----------|
| 1 | Motlakase |
| 2 | Kgase     |


- 3 Parafini
- 4 Patsi, mashala
- 5 Ha hong, Hlalosa .....


12 Le thola metsi hokae?

- 1 Pompo e ka tlung
- 2 Pompo e ka ntle
- 3 Pompo ya motse
- 4 Nokeng
- 5 Boro
- 6 Ha hong hlalosa .....


13 Pompo ehole ha kae hae se ka tlung?

..... dimitara

14 Nah o finella disebediswa tse latelang?

Setofo (kgase, mashala, motlakase)	EYA	TJHE
Setofo sa parafini	EYA	TJHE
Maekoroweifi	EYA	TJHE
Foriji	EYA	TJHE
Thelebishini	EYA	TJHE
Seyalemoya	EYA	TJHE
Khomputara	EYA	TJHE
Founu	EYA	TJHE


15 O fihla ka mokgwa ofe dishopong, tiliniking le kerekeng?

- 1 Ke hloka thuso ho ya hohle
- 2 Ke reka ke le mong tse nyane feela
- 3 Ke kgona ho reka dihloko kaefele le le mong
- 4 Ha ke kgone ho ya shopong
- 5 Ho hong halosa


**BATLISISA KA HLOKO**

16 Ke dintho dife ho tse latelang o hlokang thuso

- 1 Ho hlapa
- 2 Ho ya ntlwaneng
- 3 Ho ikapesa mmele kaofela
- 4 Ho hlwa le ho theoha bethe
- 5 Ho sesa
- 6 Ho itokisetsa dijo ka mehla
- 7 Ho nka meriana ka nepo ka mehla
- 8 Ha ho e nhlolang


17 O hloka motho a o thusang lapeng?

EYA (1)      TJHE (2)

18 Ebang ore EYA, Tshehetsa karabo.

.....

19 Ke mang a o thuseng le a o hlokomelonng lapeng?

- 1 Bana.

- 2 Ba leloko
- 3 Basebeletsi ba lapeng
- 4 Baahisane
- 5 Baithaupi
- 6 Ha ho na motho
- 7 Hohong hlalosa .....


20 Ebang o hloka thuso ho sena ya o thusang, hobaneng?

.....

21 O hloka thuso hotse latelang?  
(Tshwaya tse nepahetseng)

- Hlatswa diaparo
- Ho tereka diaparo
- Ho pheha dijo
- Ho hlwekisa ntlo
- Ho hlaola
- Ho reka ole mang
- Ho iphepa ka nepo

EYA	TJHE
EYA	TJHE
EYA	TJHE
EYA	TJHE
EYA	TJHE
EYA	TJHE
EYA	TJHE


22 O hloka motho ho thusa ka tse boletsweng ka modimo (21)

EYA (1)	TJHE (2)
---------	----------

23 Ebang ore the hobaneng?

.....

24 Na o nka karola ho ditshebeletso tsa setjhaba

EYA (1)	TJHE (2)
---------	----------

25 Ebang ore EYA. Ke ditshebeletso dife tse o nkang karolo?

.....

26 Ebang ore TJHE hobaneng?

.....

27 Na o tseba ka ditshebeletso ka motseng?

EYA (1)	TJHE (2)	HA KE TSEBE (3)
---------	----------	-----------------

28 Hona le ditshebeletso ka motseng?

EYA (1)	TJHE (2)	HA KE TSEBE (3)
---------	----------	-----------------

29 Ebang ore EYA ke mang ya fanang ka tsona?

.....

30 Na o sebedisa ditshebeletso tseo?

EYA (1)	TJHE (2)
---------	----------

31 O sebediso tliiniki tsa se lehae?

EYA (1)	TJHE (2)
---------	----------

32 Ebang ore TJHE hobaneng?

.....

33 O batla ho dula ole hokae ka mehla?

HAE (1) LEHAE LA MAQHEQU (2) BANA (3) HO HONG (4)

34 Tshehetsa karabo ya hao.

.....

35 Ona le boemo ba ho kula moo hlokang thuso ya motho?

EYA (1) TJHE (2)

36 Ebang ore EYA. Bolela boemo boa ba ho kula.

.....

37 Ke mang a thusang ka boemo boo?

- |   |                        |
|---|------------------------|
| 1 | Bana.                  |
| 2 | Ba leloko              |
| 3 | Basebeleksi ba lapeng  |
| 4 | Baohisane              |
| 5 | Baithaupi              |
| 6 | Ha hona motho          |
| 7 | Ho hong, hlalosa ..... |

38 Na oya ho hlahloba ka mehla?

EYA (1) TJHE (2)

39 Ebang ore TJHE hobaneng?

.....

**BOEMO BA PHEPO E NEPAHETSENG**

40 O nahana oja dijho tse lekaneng ka letsatsi?

EYA (1) TJHE (2)

41 Ebang ore TJHE hlalosa karabo ya hao

.....

42 O lefa bokae ho dijo ka kgwedi?

.....

43 Hlalosa phapang pakeng tsa dijo tse phetseng le tse sa phelang hantle.

.....

44 Fana ka mohlala o le mong wa sejo se phetseng le se sa phelang hantle.

.....

**POLOKEHO KA LAPENG**

45 O Kila hlhelwake kotsi lemong sa ho feta, howa kapa ho thella?

EYA(1)	TJHE(2)
--------	---------

46 Ka makgetlo a makae selemo se fetileng?

47 Ebang ore EYA, ho etsa hetseng?

1	O wele
2	O wele o thella
3	O la lthesa
4	Tlhaselo
5	Ho hong, bolela

48 Na o ikutlwa o bolokehile moo dulang?

EYA(1)	TJHE(2)
--------	---------

49 Ebang ore Tjhe. Hobaneng?

50 O ikutlwa o bolokehile ka tlung ya hao?

EYA(1)	TJHE(2)
--------	---------

51 Ebang ore TJHE hobaneng?

**DISEBEDISWA TSA HO THUSA**

52 O sebedisa disebediswa tsa ho thusa?

EYA(1)	TJHE(2)
--------	---------

53 Ebang ore EYA, O sebedisa eng?

1	Setulo samabidi.
2	Setsheetsi
3	Setsheetsi sa ho tsamaya
4	Dikoroko
5	Molamu wa tshepe.
6	Pitsana.
7	Thuso ya ho utlwa
8	Hohong, bolela

54 Na o kgona ho tsamaya ha bonolo ka tsona?

EYA (1)	TJHE (2)
---------	----------

55 Ebang ore TJHE. Fana ka lebaka.

56 Ebang o hloka disebediswa tse dile siyo lebaka ke lefe?

- |   |                              |
|---|------------------------------|
| 1 | Tjhelete                     |
| 2 | Ha ho tsebo moo di tholwang  |
| 3 | Hake tsebe die sebetsa lwang |
| 4 | Ho hong bolelo .....         |


57 O sebedisa maleiri a batho ba hodileng?

EYA (1)	TJHE (2)
---------	----------

58 Ebang ore eya. Na a mangata ho a sebeditsa matsatsi ohle?

EYA (1)	TJHE (2)
---------	----------

59 Ebang ore TJHE, hobaneng.

- |   |                          |
|---|--------------------------|
| 1 | Chelete                  |
| 2 | Ha ke tsebe a tholwa kae |
| 3 | Hake, kgone ho ya a reka |
| 4 | Ho hong bolelo .....     |


**TSAMAISO YA DITJHELETE**

60 O tsamaisa ditjhelete o le mong?

EYA (1)	THE (2)
---------	---------

61 Ebang ore TJHE. Ke mang ya o thusang?

- |   |                               |
|---|-------------------------------|
| 1 | Bana                          |
| 2 | Ba leloko                     |
| 3 | Basebeleletsi ba lapeng       |
| 4 | Bahaelwane/Bahaisane          |
| 5 | Baithaupi                     |
| 6 | Ba bang ntle le ba boletsweng |


62 O kgotsofalletse. Mokgwa oo tjhelete ya hao e sebediswang ka teng?

EYA (1)	TJHE (2)
---------	----------

63 O fumana patala kgwedi le kgwedi?

EYA (1)	TJHE (2)
---------	----------

64 Ebang ore TJHE. Bolela mathata a hao.

.....

65 O fumana tjhelete ya penshene ho tswa hokae?

- |             |              |
|-------------|--------------|
| SASSA       |              |
| SEPHIRING   |              |
| HA HO LETHO |              |
| Ho hong     | Bolela ..... |


66 Hloko engwe e o batlang hoe bolela?

.....



# ***ADDENDUM K***

## ***Part One of Questionnaire (Afrikaans)***

**VRAELYS (DEEL 1) IDENTIFISEER VERSWAKTE BEJAARDE**

**Opdrag**

Merk die toepaslike blokkie met 'n X of u antwoord op die spatie voorsien.

**AGTERGROND GESKIEDENIS**

- 1 Datum vraelys voltooi (dd/mm/jj) ...../...../.....
- 2 What is u geslag?  

Manlik(1)	Vroulik (2)
-----------	-------------
- 3 Wat is u geboortedatum? (dd/mm/jj) ...../...../.....
- 4 Wat was u beroep? .....
- 5 Wat is u hoogste kwalifikasie?

1	Geen skool bygewoon
2	Primêre skool bygewoon
3	Sekondêre skool bygewoon
4	Diploma/Graad
5	Ander (Spesifiseer) .....
- 6 Wat is u huweliksstatus?

1	Ongetroud
2	Getroud/Tradisionele troue
3	Geskei/Vervreemd
4	Weduwee/Wewenaar
5	Leef aleen
- 7 Wat is u huistaal?

1	Afrikaans
2	Engels
3	Sesotho
4	Zulu
5	Ander, spesifiseer .....
- 8 Watter van die volgende kroniese siektetoestande het u?

1	Diabetis
2	Hoë Bloeddruk
3	Lae Bloeddruk
4	Cholesterol
5	Epilepsie
6	TB
7	Oog probleme
8	Arthritis
9	Long siektes, verduidelik .....
10	Ander, spesifiseer .....
- 9 Het u enige gestremdheid?  

JA (1)	NEE (2)
--------	---------
- 10 As JA noem die gestremdhede wat u het?  
.....
- 11 Watter aktiwiteite kan u doen op u eie?  

1	Kan bad/stort en was uself op u eie
---	-------------------------------------

Kantoor gebruik

--	--	--

d	d	m	m	j	j

--

d	d	m	m	j	j

--	--

--	--

--

--	--	--


--

--	--

- JA (1)    NEE (2)
- 2 Kan u die toilet op u eie gebruik/klim self op en af van toilet of commode by uself?
- JA (1)    NEE (2)
- 3 Trek self aan / bo en onderdele?
- JA (1)    NEE (2)
- 4 Kan uself in en uit die bed klim?
- JA (1)    NEE (2)
- 5 Het u goeie blaas beheer en beheer oor u opelyf?
- JA (1)    NEE (2)
- 6 Kan u, u eie etes voorberei onafhanklik?
- JA (1)    NEE (2)
- 7 Kan u, u eie medikasie korrek en op tyd neem?
- JA (1)    NEE (2)
- 8 Kan u, u eie inkopies doen in die dorp?
- JA (1)    NEE (2)
- 9 Kan u op u eie loop en trappe klim?
- JA (1)    NEE (2)
- 10 Kan u, u eie etes voorberei en kook daaglik?
- JA (1)    NEE (2)

AS MEER AS TWEE VRAE "NEE" GEANTWOORD HET IN  
VRAAG 11 VOLTOOI DEEL 2 VAN VRAELYS

**TOTALE NEE  
ANTWOORDE  
VRAAG 11**

# ***ADDENDUM L***

## ***Part Two of Questionnaire (Afrikaans)***

**VRAELYS (DEEL 2) BEHOEFTE VAN VERSWAKTE BEJAARDES**

**Opdrag**

**Merk die toepaslike blokkie met 'n X of u antwoord op die spatie voorsien.**

**ALGEMENE INLIGTING**

1 In watter soort huis woon u?

- 1 Woonstel
- 2 Hostel
- 3 Sink huis
- 4 Steen huis
- 5 Ander: .....

2 Aan wie behoort die huis waarin u woon?

.....

3 Hoeveel kamers het die huis?

.....

4 Hoeveel persone bly in die huis saam met u?

.....

5 Wat is die hoof bron van inkomste in die huis?

.....

6 Het u 'n toilet in die huis?

JA (1)    NEE (2)

7 Waar is die toilet ?

BINNE (1)    BUIITE (2)

8 Watter soort toilet gebruik u in die huis?

- 1 Spoel toilet
- 2 Put toilet
- 3 Emmer stelsel
- 4 Commode
- 5 Ander, spesifiseer .....

9 Is daar 'n plek waar u, u etes kan voorberei?

JA (1)    NEE (2)

10 Het u huis elektrisiteit?

JA (1)    NEE (2)

11 Wat gebruik u om meeste van die tyd te kook?

- 1 Elektrisiteit
- 2 Gas
- 3 Paraffien
- 4 Hout, steenkool
- 5 Ander, spesifiseer .....

Kantoor gebruik

12 Waar kry u, u water vandaan?

- 1 Kraan binne die huis
- 2 Kraan buite die huis
- 3 Gemeenskaplike kraan
- 4 Rivier
- 5 Put of Boorgat
- 6 Ander, spesifiseer .....


13 Hoe vër is u kraan as die kraan nie binne is nie?

..... Meters

14 Het u toegang tot die volgende werkende items?

	1	2
Stoof (Gas, steenkool, elektrisiteit)	JA	NEE
Primus/Parraffien stofie	JA	NEE
Mikrogolf	JA	NEE
Yskas/vieskas	JA	NEE
Televisie	JA	NEE
Radio	JA	NEE
Komper (Computer)	JA	NEE
Selfoon	JA	NEE


15 Hoe gaan u na die winkel, kliniek of kerk toe?

- 1 Het hulp nodig met enige aankope
- 2 Doen onafhanklik aankope vir klein inkopies
- 3 Onafhanklik, doen alle aankope self
- 4 Kan glad nie aankope self doen nie
- 5 Ander, spesifiseer .....


**ONDERSOEK DIE BEHOEFTE**

16 Watter aktiwiteite kan u op u eie doen?

- 1 Kan self bad of stort op my eie
- 2 Kan self op en af van die toilet kom
- 3 Trek self aan bo en onder dele van liggaam
- 4 Kan self in / uit die bed klim by u self
- 5 Goeie blaas en maag beheer
- 6 Berei eie etes voor daaglik
- 7 Neem eie medikasie daaglik in korrekte dosis en op tyd
- 8 Geen van genoemde


17 Het u iemand nodig om u in die huis te help?

JA (1)	NEE (2)
--------	---------

18 As JA motiveer u antwoord.

.....

19 Wie help en sorg vir u by die huis?

- 1 Kinders
- 2 Familie lede
- 3 Tuis versorgers (Home Base Carers)
- 4 Bure
- 5 Vrywilligers
- 6 Niemand
- 7 Ander, Spesifiseer .....

20 As u hulp nodig het in u huis en niemand help u nie, hoekom nie?

.....

21 Het u hulp nodig met die volgende aktiwiteite in u huis?  
(Merk al die toepaslike opsies)

	1	2
Was klere	JA	NEE
Stryk klere	JA	NEE
Berei voor en kook kos	JA	NEE
Huis skoonmaak	JA	NEE
Werk in die tuin	JA	NEE
Inkopies doen / aankope	JA	NEE
Persoonlike sorg	JA	NEE

22 Het u iemand om u te help met bo-genoemde aktiwiteite?

JA (1)	NEE (2)
--------	---------

23 As NEE hoekom nie?  
 .....

24 Neem u deel aan enige sosiale aktiwiteite?  

JA (1)	NEE (2)
--------	---------

25 As JA aan watter sosiale aktiwiteite neem u deel?  
 .....

26 As NEE hoekom nie?  
 .....

27 Weet u van enige verswakte sorg in die gemeenskap?  

JA (1)	NEE (2)	WEET NIE (3)
--------	---------	--------------

28 Is daar enige verswakte sorg dienste beskikbaar in u gemeenskap?  

JA (1)	NEE (2)	WEET NIE (3)	
--------	---------	--------------	--

29 As JA wie lewer hierdie dienste?  
 .....

30 Maak u gebruik van hierdie dienste?  

JA (1)	NEE (2)
--------	---------

31 Maak u gebruik van die plaaslike kliniek?  

JA (1)	NEE (2)
--------	---------

32 As NEE hoekom nie?  
 .....

33 Waar verkies u om meeste van die tyd te bly?  

TUIS (1)	OUETEHUIS (2)	KINDERS (3)	ANDER (4)
----------	---------------	-------------	-----------

34 Motiveer u antwoord.  
 .....

35 Het u enige mediese toestand waar u afhanklik is van iemand vir hulp?  

JA (1)	NEE (2)
--------	---------

36 As JA noem die mediese toestand  
 .....

37 Wie help u met die mediese toestand tuis?

1	Kinders
2	Familie lede
3	Tuisversorgers (Home Base Carers)
4	Bure
5	Vrywilligers




- 6 Niemand
- 7 Ander, spesifiseer .....

38 Gaan u gereeld vir mediese opvolge?

JA (1)  NO (2)

39 As NEE hoekom nie?

.....

**VOEDING STATUS**

40 Dink u dat u genoeg voedsel eet per dag?

JA (1)  NEE (2)

41 As NEE verduidelik u antwoord

.....

42 Hoveel spandeer u aan kos maandeliks?

.....

43 Verduidelik die verskil tussen gesonde en nie-gesonde voedsel.

.....

44 Gee een voorbeeld van gesonde en nie-gesonde voedsel.

.....

**VEILIGHEID TUIS**

45 Het u 'n ongeluk gehad in die laaste jaar, gegly of geval?

JA (1)  NEE (2)

46 Hoeveel ongelukke die laaste jaar?

.....

47 As JA wat het gebeur?

- 1 Geval
- 2 Geval omdat ek gegly het
- 3 Myself gebrand
- 4 Aangerand
- 5 Ander, spesifiseer .....

48 Voel u veilig in die area waar u woon?

JA (1)  NEE (2)

49 As NEE hoekom is dit nie veilig nie?

.....

50 Voel u veilig in u huis?

JA (1)  NEE (2)

51 As NEE hoekom nie?

.....  
**HULP MIDDELS**

52 Maak u gebruik van enige hulpmiddels?

JA (1)  NEE (2)

53 As JA watter hulp middels gebruik u?

- 1 Rolstoel
- 2 Loper
- 3 Loopraam
- 4 Krukke
- 5 Hout kiere/Metaal kiere
- 6 Commode
- 7 Gehoorapparaat
- 8 Ander, spesifiseer .....

54 Kan u maklik rondbeweeg met die hulpmiddels?

JA (1)  NEE (2)

55 As NEE wat is die rede?

.....

56 As u hulpmiddels nodig het, en nie daarvoor beskik nie, hoekom nie?

- 1 Finansies
- 2 Weet nie waar om te kry nie
- 3 Weet nie hoe om te gebruik nie
- 4 Ander, spesifiseer .....

57 Gebruik u volwasse doeke?

JA (1)  NEE (2)

58 As JA is die doeke genoeg vir elke dag se gebruik?

JA (1)  NEE (2)

59 As NEE hoekom nie?

- Finansies
- Weet nie waar om te kry nie
- Nie instaat om doeke te gaan koop nie
- Ander, spesifiseer .....

**FINANSIËLE VERSLAG**

60 Bestuur u, u eie finansies onafhanklik?

JA (1)  NEE (2)

61 As NEE wie help u met u finansies.

- 1 Kinders
- 2 Familielede
- 3 Tuisversorgers (Home Base Carers)
- 4 Bure
- 5 Vrywilligers

6 Ander, spesifiseer .....

62 Is u tevrede hoe u finansies bestuur word?

JA (1)  NEE (2)

63 Ontvang u, u maandelikse gelde?

JA (1)  NEE (2)

64 As NEE hoekom nie?

.....

65 Van waar ontvang u, u maandelikse pensioen vandaan?

1	SASSA
2	PRIVAAT
3	GEEN
4	ANDER

Spesifiseer .....

66 Enige ander behoefte wat u wil noem.

.....

***ADDENDUM M***

***Confidentiality Agreement***  
***fieldworkers***

## CONFIDENTIALITY AGREEMENT FIELDWORKERS

### PROJECT TITLE: CARE NEEDS OF THE FRAIL ELDELRY AT HOME IN MATWABENG

I, \_\_\_\_\_, the Field worker have been hired to

---

I, agree to:

1. To keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format with anyone other than the Researcher.
2. Keep all research information in the questionnaires confidential and secure while it is in my possession.
3. Return all research information and all the questionnaires to the Researcher when I have completed the research tasks.
4. After consulting with the Researcher. Destroy all research information used in the questionnaires regarding this research project that is not returnable to the Researcher.
5. Frail elderly who needs to be referred will the fieldworkers contact the researcher that will do the referring to the local social worker in Matwabeng. This information will also be kept confidential.

---

(Print name)

---

(Signature)

---

(Date)

***ADDENDUM N***

***Approval Evaluation Committee***

Date: 1 August 2018

Dr. D.E. van Jaarsveldt  
Chairperson: Research Committee  
School of Nursing

Dear Dr. Van Jaarsveldt

**REPORT: EVALUATION COMMITTEE: Quantitative and mixed method studies**

*Please indicate with x the applicable study:*

PhD (NVRT 9100)	MSocSci (NVRT8900)	√	Principal investigator	
Thesis	Dissertation	√	Publishable Articles	

*Please complete:*

<b>Title of the study:</b>	Care needs of the frail elderly at home in Matwabeng
Candidate:	Elizabeth Catarina (Bets) Nieuwenhuis
Supervisor:	Dr Idalia Venter
Co-Supervisor:	Ms Lizemari Hugo

**Members of the Evaluation Committee:**

**Fixed members:**

*Please indicate in the blocks one of the options:  
Present (P) Absent (A) Not applicable (NA)*

**Applicable niche lead researcher OR a member of the SoN**

Prof. Y. Botma	Niche area: Innovative tools in health teaching	NA
<b>Or</b>		
Dr. M. Reid	Niche area: Health Communication	P
<b>Or</b>		
Dr. D. Botha	Only for proposal on child and maternal health	NA
<b>Or</b>		
Member of SoN	Dr D van Jaarsveldt	P

**Additional members** : ( Please complete by filling in the names and if they are present, absent or not applicable)

Name: Ms Heidi Morgan Cell no: 0514013628 E-mail: <a href="mailto:morganh@ufs.ac.za">morganh@ufs.ac.za</a>		P
Name: Ms Lorna Stuart Cell no: E-mail: <a href="mailto:fichardtbestuur@trans50.org.za">fichardtbestuur@trans50.org.za</a>		A
Name: Ms Riette Nel Cell no: 0514013116 E-mail: <a href="mailto:gnbsmn@ufs.ac.za">gnbsmn@ufs.ac.za</a>	Biostatistician	P
Name: Dr Idalia Venter Cell no: 0834414885 E-mail: <a href="mailto:venterl2@ufs.ac.za">venterl2@ufs.ac.za</a>	Supervisor	A
Name: Ms Lizemari Hugo Cell no: 0827812699 E-mail: <a href="mailto:hugoL1@ufs.ac.za">hugoL1@ufs.ac.za</a>	Co-supervisor	P
Name: Bets Nieuwenhuis Cell no: 0829259387 E-mail: <a href="mailto:ssvb@webmail.co.za">ssvb@webmail.co.za</a>	Student	P

**Recommendations from Evaluation Committee:**

The committee recommended that corrections be made and recirculated among the committee members. This has been done and no further feedback has been received from any of the members. Indicating that they are satisfied.

  
Supervisor

24 October 2016

  
Chairperson