Empowering patients with hypertension in a public health system towards enhanced self-care through psycho-education

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Dissertation in partial fulfilment of the requirements for the degree Master of Health Science in Transdisciplinary Health Promotion at the Potchefstroom Campus of the North-West University

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PREFACE

The article format has been chosen for this dissertation. This is the format approved and recommended by the North-West University (NWU). The dissertation consists of a motivation, literature study, a manuscript to be submitted to a peer reviewed journal, namely, Quarterly of Community Health Education and a concluding chapter, which summarises the main findings and recommendations.

The layout of the dissertation is as follows:

Section 1: An introduction to the research with the background leading to the problem statement. The methodology is motivated as well as validity and credibility and ethical considerations proposed.

Section 2: A literature review aimed at informing the reader as to the theoretical origins of the concept of self-care, the various issues regarding self-care, the need thereof in the current South African public health systems and the implementation of self-care in the South African context, applied to the realities of hypertension.

Section 3: The results are presented in a manuscript titled "Utilising psycho-education to enhance self-care of patients with chronic hypertension in a South African public health system" in the Quarterly of Community Health Education Journal.

Section 4: The conclusion of the research ends with an evaluation of the proposed methodology and the realisation thereof. Limitations are identified, and recommendations formulated to improve the psycho-educational support offered to hypertensive patients within a public health system towards enhanced self-care.

Each section’s references are included at the end of the section. Section 1, 2, and 4 follow the Harvard style of referencing. Chapter 3 is according to the guideline instructions of Quarterly of Community Health Education Journal.
ACKNOWLEDGEMENT

My life journey must once again take a turn. With this study it will be entering the world of health – a world I have longed for and always wanted to be part of. Therefore, I have set my sails in this new direction hoping to make a difference in the lives of everyday people, hoping to leave my mark in those hearts which I touched.

This new direction would not have been possible without the love and support of my family:

- My husband, Anton. Thank you for the support, patience and love that you always show. You are my hero!
- My sister, Laura, You are just the best!
- To my kids Malcolm, Jessica and Anthony.

To the main captain of the ship, Prof Petra Bester, a feeble thank you seems so little but without you and your constant encouragement, all would have been lost. Thank you.
DECLARATION

I hereby declare that this dissertation is my own work and has not been submitted to any institution before. I declare that this work has not been plagiarised, nor did I violate any copyright restrictions. I declare that I gave due references to all the sources used in the dissertation and that the sources are completely and accurately referenced in the list of references.

__________________________________________  ____________________________
Lynn D. Preston                                      Date
AUTHOR CONTRIBUTIONS

No one, other than the authors listed below, have contributed substantially to the writing and revising of the manuscript.

Study conception and design: Dr LD Preston; Prof P. Bester; Prof I.M. Kruger

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Prof P. Bester ___________________________ Date

Prof I.M. Kruger ___________________________ Date

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The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the NRF.
ABSTRACT

The increased number of patients with multi-morbidities in the South African health system, implies that without adequate patient self-care, an additional burden on an already overstressed public health system is evident.

Due to staff shortages and resource limitations, there is inadequate time for medical staff to provide acceptable and appropriate health education to patients. In the interim, psycho-education may potentially serve as a health promotion strategy to empower patients with hypertension towards implementing enhanced self-care. Psycho-education also creates a better understanding of the illness for both the patient and their family by encouraging self-reliance through self-care and promoting individual responsibility, rather than relying completely on the health system. The eco-systemic framework (Lindau, et al., 2016; Yardley, et al., 2015), the building blocks of functional health system (WHO, 2011), and the middle-range theory of self-care (Riegel, et al., 2012.) serve as theoretical underpinning for this study.

Recruitment and data collection commenced after ethical clearance was obtained from the Health Research Ethics Committee (HREC) of the North-West University, and permission was granted by the North West Provincial Department of Health. Through a qualitative, explorative, interpretive descriptive, contextual design, the researcher recruited hypertensive adult patients, who were attending an out-patient clinic at a selected district hospital in the Dr Kenneth Kaunda district, North West province in South Africa, as participants (N=250). Through purposive sampling, the included participants were all diagnosed with chronic hypertension for at least six (6) months, with no restriction placed on gender, race, or age. Hospital management served as gatekeeper and the unit manager as the mediator.

Participants were required to sign an informed consent declaration, which included permission to be digitally audio-recorded. A total of twenty-four (24) participants (n=24) were interviewed until data saturation was obtained. Data was collected by means of semi-structured, individual interviews, conducted on the hospital’s premises. The interviews were digitally voice-recorded and transcribed for data analysis. Firstly, a generic thematic analysis was performed (Thorne, 2008:141-162), after which a reasoning process followed. Coding led to a second level of analysis to describe the relationship between themes (Thorne, 2008:141-162). A consensus discussion was held with a co-coder and field notes were kept, and observations noted, which all added to the richness of the collected data. Credibility was ensured by applying the evaluation criteria of interpretative description (Thorne, 2016:232), by examining the assumptions about the nature of the knowledge and experiences of the patients. The sample facilitated representative credibility.
and prolonged engagement with the medical out-patient department, which led to the application of applied logic engendering truthful interpretation.

Data analysis resulted in six (6) themes, namely, positive and negative organisational factors, patient-specific needs, patterns in health education, perceptions regarding hypertension, and the lack of support for elderly and frail patients.

This study provides an understanding of how patients with hypertension experience the public health system’s care; view their own self-care and how they cope with hypertension. Consequently, it provided the researcher with relevant information to formulate applicable recommendations for psycho-educational interventions with the aim to empower hypertensive patients to implement enhanced and optimal self-care.

**Key words:** Empower, care, coping, resources, hypertension, public health system, self-care, psycho-education.

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<td>ANC</td>
<td>African National Congress</td>
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<td>AUTHeR</td>
<td>Africa Unit for Transdisciplinary Health Research</td>
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<td>BP</td>
<td>Blood pressure</td>
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<td>BMI</td>
<td>Body Mass Index</td>
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<td>CD</td>
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<td>CEO</td>
<td>Chief executive officer</td>
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<td>CMD</td>
<td>Common mental disorders</td>
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<td>Essential Medicines List</td>
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<td>GACD</td>
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<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>HPCSA</td>
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<td>ICDM</td>
<td>Integrated Chronic Disease Management Manual</td>
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<td>MOPD</td>
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<td>NDoH</td>
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<td>PHC</td>
<td>Primary healthcare</td>
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<td>QoL</td>
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<td>STG</td>
<td>Standard Treatment Guidelines</td>
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<td>TG</td>
<td>Triglycerides</td>
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<td>Total cholesterol</td>
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<td>TIE</td>
<td>Time, Inconvenience and Expenses</td>
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<td>WHO</td>
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LIST OF CONCEPTUAL DEFINITIONS

**Care:** Care is presented as having a dualistic meaning. Firstly, the term refers to the services rendered to the benefit of the patient by members of a multi-disciplinary team. Care is multi-dimensional and involves many aspects, such as positive attitudes and competence of health professionals, a clean and therapeutic environment, individualised treatment and being listened to (Ndou, *et al.*, 2016:4). Secondly, care is related to patients’ purposeful actions towards themselves; this is considered self-care (Riegel, *et al.*, 2012), which will be fully defined hereafter. In South Africa, care in terms of patients with hypertension is based on the Integrated Chronic Disease Management (ICDM) model (Department of Health, 2011). Care, in this research, denotes the experiences of care that hypertension patients receive in an overburdened public health system and how these patients care for themselves.

**Self-care:** Self-care differs between health and illness. This research focuses on self-care in the context of hypertension as a chronic disease. Self-care is defined by Riegel *et al.* (2012) as the naturalistic decision-making process of self-care maintenance, self-care monitoring and self-care management. Self-care maintenance refers to the ability of patients with hypertension to maintain emotional and physical stability. Through self-care monitoring the patient observes changes in his/her signs and symptoms of hypertension. Therefore, self-care management is the patient’s response to the signs and symptoms as they occur.

**Empowering:** This term denotes a process by which people obtain control over the choices and events influencing their lives. Through this process, they can improve themselves, increase their assets and can build capability to get access, networks, allies and/or a voice, with the intention of more control (WHO, 2017). In this research it is argued that an educational psychologist can empower a patient with hypertension to implement enhanced self-care within a public health system.

**Coping strategies:** Coping strategies refer to specific efforts that a human being employs to overcome, master, endure, reduce or minimise stressful events (Taylor, 1998). The act of coping is defined as the individual’s thoughts and behaviours to manage the internal and external demands of stressful situations (Ito & Matsushima, 2016:298-299). Defensive or active coping (AC), or avoidance strategies or loss of control, (also known as passive coping (PC) are referred to as low AC and is the most prominent coping strategy seen in patients with hypertension (Malan *et al.*, 2013:391-392). Other adaptive coping strategies involve positive reappraisal, a sense of humour and problem-solving (Rueda & Pérez-García, 2013:1154). Maladaptive emotion-focused coping strategies include fatalism, self-blame and avoidance of talking about the situation (Rueda...
& Pérez-García, 2013:1154). Therefore, active coping generally refers to purposeful ways in which an individual deals with problems, seeks comfort and social support, while passive coping can, for example, include self-imposed social isolation and withdrawal. Coping strategies in this research denote to how patients with hypertension deal with this chronic disease within the context of an overburdened public health system.

**Resources for patients:** The South African health system, which provides resources for patients, can vary from the most basic primary healthcare (PHC), which is usually offered free by the state at local clinics, to highly specialised, hi-tech health services available in both the public and private sectors, the latter usually being found in larger cities (Anon., 2016; Tibane & Lentsoane, 2016). Certain services of this two-tiered system are inequitable and inaccessible to a large portion of South Africans. As the public sector is under-resourced and financially restricted with the state only contributing approximately 40% to health expenditure, this sector delivers services to approximately 80% of the population. The situation is compounded by poor management and deteriorating infrastructure resulting in improved access but declining quality of healthcare (Anon, 2016; Tibane & Lentsoane, 2016). For the purpose of this research the resources for patients with hypertension denote to any type of support (physical, emotional or environmental, medication, staff input and the monitoring of their disease) that patients are aware of, utilise and need.

**Hypertension:** Hypertension is a long-term or chronic condition where the patient’s blood pressure (BP) is higher than normal. BP is the force of your blood moving against the walls of your arteries and is easily measurable without any discomfort and can be prevented and controlled. Normal BP is below 120/80 (NICE, 2016), meaning less than 120 mmHg of systolic blood pressure and less than 80 mmHg of diastolic blood pressure. More recent studies suggest that a blood pressure of 130/80 is a more realistic figure and should, therefore, be the desired target (Whelton et al., 2017:209). Blood pressure less than 140/90 mmHg but above 120/80 mmHg can be interpreted as being at a risk of becoming hypertensive and requires immediate lifestyle changes. A blood pressure above 140/90 mmHg requires medical care and treatment is needed to avoid heart disease or stroke (NICE, 2016). This research refers, therefore, to hypertension as a chronic disease and refers to patients with hypertension.

**South African public health system:** South Africa’s (SA’s) health system consists of a large public state-funded sector, a smaller, but fast growing private sector and a non-governmental organisation (NGO) sector (Jobson, 2015).

According to the Public Health Association of South Africa (PHASA, 2011), there are 4,200 public health facilities in South Africa, of which, 376 are public hospitals with 143 in urban areas and 233 in rural areas. Every facility, clinic and hospital provides services, on average, for 13,718 persons.
per facility. The three (3) main types of health facilities available within a district are a) the district hospital, b) the community health centre and c) the local clinic. In each clinic there is a PHC team, which has the same medical qualities that are already present in the other facilities. The outreach teams are made up of a professional nurse and an enrolled nurse with approximately four (4) to six (6) community healthcare workers. They care for about 6,000 people and usually refer complex clinical cases back to the doctor or nurse at the clinic (PHASA, 2011). The public health system, where patients with hypertension obtain treatment, is overburdened and under-resourced. For 2, 5 million South Africans, their nearest clinic is more than five (5) kilometres away from their homes (Jobson, 2015).

**Health:** The definition of health as defined by the World Health Organisation (WHO, 1948:100) is “… a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. This definition has not been amended since 1948. However, more recent evaluations (Irwin, 2010, 2), have incorporated intrinsic and extrinsic determinants of health, such as genetics, behaviour, culture, habits, lifestyles, preventative, curative and promotional aspects. In the Ottawa Charter for Health Promotion established in 1986 (cited by WHO, 1986), it was stated that health is "a resource for everyday life, not the objective of living. Health is a positive concept emphasising social and personal resources, as well as physical capacities." (WHO, 1986). Public health systems play an integral role in preventing, promoting, curing and rehabilititating the health of patients with hypertension.

**Regulations defining the scope of the profession of psychology:** Regulations are presented by the National Department of Health, South Africa, 1974. Health Professions Act (Act no. 56 of 1974) (Government notice no, R. 993). Government gazette, 3143316 September 2008) regarding the scope of practice. The scope of the profession of psychology states that the following actions pertain to this profession: evaluation of behaviour or mental processes or adjustments (personality or individual); the use of any psychological method or practice aimed at aiding individuals or groups in the adjustment of personality; and emotional or behaviour problems. Furthermore, psychologists may make use of any psychological method or psychological counselling to prevent personality, emotional, cognitive behavioural adjustment problems or mental illnesses of individuals or groups of people.

However, it must be noted that the scope of practice was declared invalid for all psychologists. During 2014 two parties instituted court proceedings to challenge the validity of the Regulations. Those parties were the Recognition of Life Long Learning in Psychology Action Group Alliance (“ReLPAG”) and the Justice Alliance of South Africa (“JASA”). Consequently, the Health Professions Act (Act no. 56 of 1974) and it’s regulations that define the scope of practitioners of the profession of psychology (Health Professions Act (Act no. 56 of 1974) (Government notice
no, R. 993). Government gazette, 3143316 September 2008) will be referred to as defining legal parameters for functioning psychologists until the scope is amended. This research acknowledges the scope of practice of all the members of the multi-disciplinary team working within the comprehensive management of patients with hypertension.

**Educational psychologist:** The Health Professions Act (Act no. 56 of 1974) regulations (R263 of 6 April 2010) (South Africa, xxx), defines the scope of practitioners of the profession of educational psychology. This regulation states that an educational psychologist can perform assessments, identify and diagnose psychopathology in relation to learning and development; identify and diagnose barriers to learning and development; apply psychological interventions to enhance, promote and facilitate optimal learning and development, and perform therapeutic interventions in relation to learning and development. If deemed necessary, clients are referred to appropriate professionals for further assessment or interventions. Furthermore, assessing cognitive, personality, emotional, and neuropsychological functions in relation to the learning and development in which they have been trained can be performed. The educational psychologist is presented in this research as a member of the multi-professional team that can play an active role in the management of patients with hypertension, especially within overburdened public health systems.

**Psycho-educational interventions:** Psycho-educational interventions are not seen as treatment in itself but, in clinical settings at least, are viewed as the first step in the overall treatment plan (Ågren et al., 2015:11; AIPC, 2014; Barlow & Ellard, 2004:637-638; Capurso & Ragni, 2016:173). Psycho-educational interventions encompass a broad range of activities that combine educational aspects, counselling, supportive group or individual interventions (AIPC, 2014). These interventions are offered to patients and are tailored or standardised to the unique needs of the situation or patient (Anon., 2012; Barlow & Ellard, 2004:639; Capurso & Ragni, 2016:173). Furthermore, psycho-educational interventions are effective in dealing with patients and their families, teaching patients and families about the nature of the illness, its treatment, relevant coping and management strategies and skills required to avoid relapses (AIPC, 2014; Anon, 2012; Capurso & Ragni, 2016:173). Psycho-education includes cognitive, behavioural, and supportive therapeutic elements which increase knowledge and insight into the illness and the treatment thereof (Ågren et al., 2015:12; Anon, 2012; Capurso & Ragni, 2016:183; Dieng et al., 2015:23). In this research study, psycho-educational interventions present the valued proposition to empower patients with hypertension to implement improved self-care within a public health system.
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SECTION 1: INTRODUCTION AND OVERVIEW OF THE RESEARCH

Effective health care depends on self-care; this fact is currently heralded as if it were a discovery (Ivan Illich, 1971)

1.1 Introduction

Hypertension is a chronic disease referred to as the silent killer and presents as a major cause of global mortality (WHO, 2013:5). The vast number of patients with hypertension in South Africa requires chronic disease management and places an additional burden on an already overstressed public health system (Mahomed & Asmall, 2015:1). The burden of chronic diseases coincides with a vast ageing and HIV-affected population in South Africa (Hofman, 2014:747). The South African Integrated Chronic Disease Management (ICDM) model (Department of Health, 2011:1) is presented as a holistic and comprehensive approach to managing patients with chronic communicable and non-communicable diseases based on the principles of primary healthcare (PHC). The ICDM model strives to facilitate assisted self-management of chronic diseases of affected patients (DoH, 2011:1). Assisted self-management is seen as an essential support mechanism towards self-care. Self-care is seen as self-maintenance, self-monitoring and self-management (Riegel et al., 2012:5). Assisted self-management potentially enables patients' to self-care within their community in an overburdened health system. In the overburdened health system, long waiting queues cannot ensure sufficient time for health professionals to always provide the necessary bio-psycho-social support and health education necessary to empower patients' with hypertension towards optimal care or even enhanced self-care. Furthermore, when considering the social determinants of health, it is evident that chronic disease management for patients with hypertension is complicated.

It is within this practical reality that the researcher argues that psycho-education can present a positive value proposition to empower patients with hypertension to implement enhanced self-care as part of a health promotion strategy within the South African public health system. A possible new dimension for psycho-education may be presented whereby educational psychologists actively participate in the chronic disease management of such patients. Psycho-education entails the cognitive, behavioural and supportive therapeutic elements (AIPC, 2014) which increase patients' knowledge and insight into hypertension and their self-care. Psycho-education can empower patients with hypertension in a public health system by encouraging them to practise enhanced care and self-care, constructive coping and to mobilise available internal- and external resources within their self-care of this disease.
1.2 Background to the research

1.2.1 From curative care to health promotion

Over the years the concept of health changed. While it was initially defined by the WHO in the Preamble to the Constitution of the WHO in 1948 as the complete bio-psychosocial well-being and not just the absence of disease. Almost four decades later, the state of health was re-evaluated, leading to the conclusion that health is determined by both intrinsic forces such as genetics, behaviour, culture, habits and lifestyles, and extrinsic forces such as preventative, curative and promotional aspects (WHO, 1986). The Ottawa Charter of 1986 brought a shift to the understanding of health. The definition of health changed from a mere passive presence of bio-psychosocial characteristics to the active promotion thereof (WHO, 1986) which led to a new dimension in public health. Health and health promotion both depend on a secure foundation of eight fundamental conditions and resources for health. Also known as the prerequisites for health, these are listed as food, peace, shelter, education, income, social justice and equity, sustainable resources, and a stable eco-system. Six (6) years later, the African National Congress (ANC), in its 1992 policy document “Ready to govern” (1992, as cited in ANC, 2012), elaborated that health is a basic human right and best presented in South Africa through primary healthcare (PHC) (ANC, 2012). By 1994, the ANC had initiated a process of developing an overall National Health Plan based on a PHC approach (ANC, 1994). A health service reformation that suggested actions which evolved from a curative to a more comprehensive approach in healthcare systems, including services that are promotive, preventative, curative and rehabilitative, with a specific focus on chronic diseases.

South Africa health promotion has evolved from being merely general health education to incorporate more comprehensive programmes, including education, training, research, legislation, policy co-ordination and community development. In short, health promotion can now be viewed as a collective action in the form of a multi-sectoral and multi-disciplinary approach, requiring total co-operation in order to attain the goal of a long and healthy life for all South Africans (ANC, 1994; Department of Health, 2014:2; Motsoaledi, 2014:1). The South African National Health Promotion Policy and Strategy: 2015-2019 (Department of Health, 2014:1) defines health promotion as incorporating a diverse range of concepts related to health education, communication for social and behavioural change, information, social marketing, advocacy and social and community mobilisation. The World Health Organisation describes the South African National Health Promotion Policy and Strategy 2015–2019 as one that represents the global shift towards “the process of enabling people to take control over, and to improve, their health” (WHO, 1986). These principles encourage the promotion of safe environments for people to live and work.
in, initiatives to develop a healthy public policy; support to promote community action, assistance to develop personal skills and equip people with information to promote their own health, and the re-orientation of health services in order to effectively promote health outside the health sector (Coulson, 2000). Furthermore, this policy states that health promotion does not only focus on impacting the individual and their behavioural outcomes, but also aims to impact social networks, and community norms and attitudes.

1.2.2 The determinants of health

When encouraging the process of empowering people to take control of and improve their health (WHO, 1986), a range of personal, social, economic and environmental factors that influence health status (WHO, 2011) must be considered. These factors are known as determinants of health and are factors that directly or indirectly affect an individual's health. Examples of such factors are education, physical environments, employment, working conditions, social conditions, poverty, social support networks and supportive, and understanding communities (Bell et al., 2000:349; Estelle-Brazzell Horton, 2014:5; WHO, 2011). The social determinants of health are broadly clustered into daily living conditions, which include access to healthcare, healthy physical environments, fair employment, healthy working conditions and having work (WHO, 2008). Furthermore, social protection throughout patients' lifespans, the adequate distribution of power, money and resources, gender equity, political empowerment, equity in health programmes, public financing, resource depletion and a power-prosperity balance of nations (WHO, 2008) are also regarded as important factors. These determinants could and often do, affect an individual's ability and motivation to take responsibility for their health or to make choices regarding healthy behaviours (Estelle-Brazzell Horton, 2014:5). Some of these factors that affect individuals, are beyond their control whereas others are conscious, lifestyle choices.

1.2.3 Hypertension as a global health threat

High blood pressure (BP) or hypertension is seen as the foremost global cause of death (Moosa et al., 2016:797). In 2016, hypertension was responsible for 13 to 14% of all deaths worldwide (Moosa et al., 2016:797). Furthermore, it appears that this burden has increased exponentially, both globally and in South Africa, with 46,888 deaths a year (Moosa et al., 2016:797) in South Africa alone. Hypertension is also the main cause of heart failure and chronic kidney disease (Moosa et al., 2016:797). In reflecting on these figures, it must be remembered that this disease is treatable (Moosa et al., 2016:799). According to the research and monitoring unit of the Council for Medical Schemes (CMS) the top 10 chronic diseases in South Africa (listed in Figure 1.1 below), the highest chronic disease prevalence in the population covered by medical schemes, is
hypertension. Since less than 20% of South Africans have access to a medical scheme, the alarming statistics of Figure 1.1 are therefore applicable to more or less 80% of the South African population.

Figure 1-1: Top 10 diagnosed chronic disease conditions within the South African private healthcare population in 2013 (adapted from CMS, 2015)

The changing epidemiological profile in most developing countries reflects an ageing population with lifestyle-related diseases; most of which can be prevented and treated (Alzahrane & Zwi, 2012:52; Schiffrin, 2012:539; WHO, 2014). In addition to an ageing population, the nutritional habits of South Africans, which are linked to chronic diseases, also mirror negative behaviours that individuals could modify and control. These habits include poor diet, physical inactivity, tobacco use and harmful alcohol use (Bhatnagar, Dhar & Tripathi, 2016:1943; Seedat, Rayner & Veriava, 2014:293; WHO, 2013). These lifestyle diseases are usually exacerbated by poor mental health (GACD, 2013). Therefore, by considering only the physical health aspects of hypertension, a comprehensive picture is not reflected since mental disorders also have a prominent and very real negative impact on the individual, the family, the community and the environment in general.

An undetected mental disorder could create stress in the lives of patients suffering from an already stressful chronic disease such as hypertension (Kretchy, Owusu-Daaku & Danquah, 2014:25). Furthermore, merely the stigma of having a mental illness can also influence a person’s willingness to seek or take treatment (Zhao et al., 2015:2). By adding a common mental disorder such as depression and anxiety to this already volatile mix, symptoms of hypertension can be
exacerbated, placing an additional burden on an individual’s quality of life (QoL) (Al-Gamal, 2014:761) and their ability to self-care.

1.2.4 Towards enhanced self-care

Since 2002, the WHO has acknowledged that health systems should promote, restore and maintain health (WHO, 2002). However, this premise did not cater for chronic diseases until; nearly fifteen years late when the WHO’s summary (WHO, 2016) of the systems’ failure to empower patients with chronic diseases was acknowledged. Presently, the WHO (2016) highlights patients’ roles more prominently and advocates that patients takes more responsibility in their chronic disease management. This paradigm shift results in assisting patients to apply lifestyle changes and teaching them how to interact successfully with healthcare facilities. As stated at the WHO 9th Global Conference on Health Promotion held in Shanghai on 21 to 24 November 2016: “Health promotion is about enabling and empowering people, communities and societies to take charge of their own health and quality of life.” (WHO, 2016).

However, insufficient healthcare remains a reality, therefore the public health systems’ end user the patient, is noticeably neglected and not adequately attended to. Because of this situation, there should thus be a daily active participation by the healthcare user in healthcare. This implies that the patient with hypertension will be more personally involved and connected resulting in better adherence to their medication, eat properly, cease tobacco and alcohol usage, commit to exercise and interact with healthcare facilities. Patients with hypertension cannot remain passive recipients of medication (WHO, 2002) but must be empowered to make decisions and take charge of their own health and quality of life. In short, they must take responsibility for their self-care. The South African ICDM model encourages “assisted” self-management as an essential aspect in chronic disease management and aims to empower the patient with hypertension to monitor, maintain and manage self-care (ICDM manual, 2011:20).

1.2.5 The care and self-care of patients with hypertension

Patients flock to healthcare facilities to test, monitor and record their diagnostic blood pressure findings and find ways to understand the implications of their hypertensive states since many of them lack the resources and education to do so themselves at home (Department of Health, 2011:22). Evidence of this is seen in the study done by Steyn, et al. (2008:1-8), which found unrecorded diabetic complications, routinised care, polypharmacy, sub-optimal glycaemic and BP control as “routine” cases at established Western Cape PHC facilities. A 50% uncontrolled blood pressure status was a distinct feature among these incidents. With these facts evident one can see that current public PHC systems lack patient-centred initiatives, which results in patients
being excluded from being active participants in their own care. To circumvent this situation and achieve a proactive practice, multi-disciplinary teams need to interact with informed, activated patients to ensure an effective chronic care model (Steyn et al., 2008:1). Goudge et al. (2009:1) specifically urged that a better understanding of the aspects of hypertension in patients, especially in resource-limited environments, is essential for comprehensive chronic disease management. Given this requirement, there is still insufficient literature on how patients with hypertension experience care within a public health system and their awareness of caring for themselves (self-care) is sadly lacking.

1.2.6 Patients with hypertension coping with this chronic disease

The ICDM model (Department of Health, 2011:18) strives to empower patients with chronic diseases to take responsibility to manage their hypertension by understanding the preventative and promotive actions necessary to minimise complications and enable them to link meaningfully with established healthcare systems. Riegel et al. (2012:1) refers to self-care as to the responsibility of the patient to maintain health, monitoring the hypertension and timeously respond to hypertension-related signs and symptoms. Optimal patient outcomes are linked to patients that are informed, motivated and adherent. According to the ICDM (Department of Health, 2011:18) this can only be obtained through high-risk identifications and referrals, support to patients who are already stabilised on chronic treatment, health promotion and education, age appropriate support groups aimed at maintaining and strengthening patients’ control of their own health. All of these outcomes are, in this research, referred to as self-care. Thus, patients need motivation, knowledge and skills to cope with unhealthy and risky behaviours and the routine clinical care rendered cannot provide the necessary health promotion and prevention necessary to truly empower patients (WHO, 2002:3). Although coping with a chronic disease is acknowledged by the WHO, there is still insufficient literature explaining how patients with hypertension, who are dependent on public health systems cope with this disease.

1.2.7 The resources required by patients with hypertension

Patients that are impoverished lack the resources and education to monitor their own health at home (Department of Health, 2011:22) and are therefore also at risk in terms of a vicious cycle of further impoverishment due to the fact that their impoverished state restricts and limits their access to healthy foods and healthcare, generally lowering their quality of functioning (WHO, 2002:20). This situation in turn impacts their health, reduces their work capacity and leads to lowered productivity (WHO, 2002:20). When a patient eventually decides to seek medical help, they face obstacles such as long distances with hours lost in travelling time, further queueing and
wastage of time at healthcare facilities and stigmatisation (WHO, 2002:22). One can thus envision the frustration and stress associated with taking time off work and understand the patients’ reservations when queueing for a whole day to get basic treatment, something that has to be repeated every few months. Thus, the patient with hypertension requires resources that actively maintain, monitor and manage the disease which would deliberately and intentionally promote self-care. This healthcare continuity is the essence of self-care promotion.

1.2.8 Psycho-education as new dimension to empower patients with hypertension towards enhanced self-care within in public health systems

As seen in the previous section on the resources required for hypertensive patients, regular healthcare contact (WHO, 2002:4) is necessary, even within a fragmented service. Chronic disease management cannot be done in isolation and should transcend patients’ living and working environments (WHO, 2002:5). This implies that care provided within a health system should extend to services and support from communities and work places in order to bridge the gap and create a holistic support system. Consequently, the answer lies in providing a comprehensive chronic disease management system (Department of Health, 2011:44), incorporating various resources (communities, other governmental departments, NGO’s etc.) to influence overall healthcare services (WHO, 2002:5) to facilitate and promote self-care (Ritsema et al., 2014:1). This is the ideal answer. However, in reality, health professionals are too pressed for time and are ill-prepared to offer behavioural interventions aimed at activating and strengthening aspects of a patients’ self-management or to attend to the psycho-social or educational needs of patients and their families (WHO, 2002:32). With patients as passive recipients of medication, aspects such as functional abilities, knowledge and personal responsibilities (WHO, 2002:32) are rarely discussed within the chronic disease management context. This is now regarded as the rule rather than encouraging patients to be active self-care participants.

Broadly calculated, 82.6% of South Africans are fully dependent on public healthcare since each South African public health facility assists about 13,718 patients (Mojaki et al. 2011; Basu, et al., 2011:1). Mojaki et al. (2011:2) conclude that district hospitals have an exceptional high case load of patients since patients go directly to the district hospital due to a failing referral system. Problems with the referral system include accessibility, acceptability, efficiency and effectiveness as factors that influence the usage of this system (Mojaki et al., 2011:1). To add to this situation, overburdened healthcare facilities have prolonged waiting times, which result in an unacceptable, stressful situation for both the queueing patients and the understaffed, pressurised health professionals (Oche & Adamo, 2013:588; Ramokgopa, 2012:17).
It is within this overburdened and under-resourced public health system that the educational psychologist can play a valuable role to empower patients with hypertension through psycho-education to encourage enhanced self-care.

1.3 Problem statement

Despite the health system paradigm shift made within South Africa from a curative to a PHC philosophy (PHASA, 2011), the current healthcare model cannot adequately cater for all the healthcare needs of the country’s population. South Africa, as with other developing countries, faces a quadruple burden of disease of which non-communicable diseases such as hypertension is a growing concern. Non-communicable or chronic diseases are closely linked to the social determinants of health and are dependent on health promotion. Within South Africa, the ICDM model has been activated to provide comprehensive care to patients with chronic diseases and is based on the principles of re-engineered PHC and self-care (Department of Health, 2011:18). This implies that patients with hypertension are empowered to become active participants in their own health. However, the current public health system fails in this active partnership, as patients with chronic diseases are still passive recipients of medication where there is insufficient time and human resources to engage longer with patients and conduct appropriate health education.

The researcher, as a registered educational psychologist being involved in community engagement tasks that provide psycho-education support services at a district hospital in the Dr Kenneth Kaunda district, North West province, has experienced an overflow of patients with chronic diseases. It was within this community involvement that the gap, which educational psychologists, by means of psycho-education, could empower patients with hypertension to practise enhanced self-care was identified. This was done by understanding the patients’ experiences of the care they received, their awareness of their self-care, their coping skills and the resources that they were aware of and which they utilised, in the public health system.

1.4 Research question

The overall research question is “How can psycho-education, as a health promotion strategy, empower patients with hypertension to practise enhanced self-care within a public health system?”

In order to answer the overarching question, the following subsequent questions were asked:

- How do patients with hypertension experience the care within a public health system?
- How do patients with hypertension care for themselves within a public health system?
• How do patients with hypertension cope with this chronic disease within a public health system?

• What are patients’ with hypertension awareness of the available resources?

• What resources do they utilise and/or need to enhance their self-care within a public health system?

1.4.1 Research aim and objectives

The overall aim of this research was to describe how psycho-education, as a health promotion strategy, could empower patients with hypertension to practise enhanced self-care within a public health system. To achieve this overall aim the objectives were to:

• explore, describe and interpret patients with hypertension experiences of the care within a public health system.

• explore, describe and interpret how aware-patients with hypertension are of their self-care within a public health system.

• explore, describe and interpret how patients with hypertension cope with this chronic disease within a public health system.

• explore, describe and interpret what are the needs of patients with hypertension in terms of awareness and utilisation of resources within a public health system.

• formulate recommendations for psycho-educational interventions as a health promotion strategy to empower patients with hypertension to practise enhanced self-care within a public health system.

1.5 Central theoretical argument

As the increased chronic disease burden impacts an already overstressed public health system in South Africa, the influence health promotion has on chronic disease management, remains a challenging issue despite the implementation of PHC re-engineering and the ICDM model. The researcher, a registered educational psychologist, experienced that psycho-education might bring a much-needed dimension to the enhancement of self-care of patients with hypertension within a public health system. It was appropriate that the researcher obtained a better understanding of how hypertensive patients within a public health system experienced their care, viewed their self-care and coping skills, as well as exploring the resources they required, utilised and were aware of, by means of a qualitative interpretive descriptive design. Once these aspects were ascertained, the researcher could then formulate recommendations for psycho-educational
interventions as a health promotion strategy to empower patients with hypertension within a public health system to practise enhanced self-care.

1.6 Paradigmatic perspectives

Since no research can be completely unhindered by the philosophical position which a person considers as personally important and numerous personal, emotional, ideological and political dimensions may impact research projects in the most unpredictable ways, it was advised that it was best to acknowledge any forms of biases that the researcher had and to truthfully admit to how these biases could or did influence the process of collecting, analysing and reporting the data that was collected. For this reason, the researcher decided on pragmatism since the core of this approach to health research focuses on issues and data relevant for making decisions and taking actions (Glasgow, 2013:257). Pragmatism is also aligned with patient-centred outcomes (Glasgow, 2013:257; Selby, Beal & Frank, 2012:1583) and has the overall goal of producing results that are relevant to stakeholders which accelerates the translation of research into practice and policy (Glasgow, 2013:259-261). This results in practical alternatives to traditional designs (Glasgow, 2013:259). According to Temple and Young (2004:171), the philosophical assumptions of the researcher will directly influence the selected research problem, the methodology and the interpretations of the research findings.

1.6.1 Theoretical assumptions

1.6.1.1 Health systems model

Health systems consist of people, organisations and resources, which act in unison to promote, restore or maintain health. The currently accepted health systems model (WHO, 2016) identifies six building blocks that operate together to address healthcare needs, namely leadership and governance, health information, human resources, finances, pharmaceuticals, and service delivery. Focusing on systems strengthening efforts to promote healthcare provision is therefore essential. Of the various aspects of health systems strengthening, innovation is listed as a pressing need to develop health delivery models that move services closer to communities (WHO, 2016). This suggests that health delivery models must involve the task shifting to lower levels of health workers who deliver services of care at community levels. In order to fulfil this innovation, approaches must be designed with and for the community being served. Brief psycho-educational interventions aimed at people with chronic diseases, in particular patients with hypertension, provides not only information regarding hypertension but also assists patients and their families to cope with the situation and adjust socially and emotionally on a daily basis to the presence of the disease (Chiquelho et al., 2011:387). Furthermore, engaging in innovative psycho-educational
interventions, good personal, psychological foundations are created with the patient and their families who need to maintain daily self-care routines and manage complex interactions with the health system in order to control the hypertension disease symptoms and avoid further complications (Rosland et al., 2013:120).

1.6.1.2 Eco-systemic framework

In addition, the eco-systemic theoretic framework will be considered (Lindau et al., 2016:1873, 1877; Yardley et al., 2015:2) since eco-systemic thinking has a relational context with an awareness of the interconnectedness between organisms, environment, cultural and social elements. From a biological perspective, an eco-systemic approach describes a view that parts of nature and the individual integrate with each other at various levels (Lindau et al., 2016:1877). The “No man is an island” statement refers to the concept that nothing is really a separate entity, but that everything is related by interactions within the self, the community and the greater physical environment (Yardley et al., 2015:2-3). This interaction may be on a biological, physical, mental or emotional level.

1.6.1.3 Middle-range theory of self-care in chronic diseases

The theory of self-care in chronic diseases by Riegel et al. (2012), serves as third component of the theoretical framework. Self-care can be considered a health promotional decision which is reflected through a set of conscious behaviours that maintain one’s health through. This is done by maintaining physiological and psychological stability, monitoring the disease status and managing one’s health through timeous health-seeking behaviours (Riegel et al., 2012). Please refer to Section 5 in Chapter 2 for a comprehensive description of this theory as applied to the South African context.

1.6.2 Methodological assumptions

Methodological assumptions consist of the assumptions made by the researcher regarding the methods used in the process of qualitative research (Creswell, 2014:185-187) and favour a qualitative design (Creswell, 2014:19-21) with an interpretive descriptive approach (Thorne, 2016:11) that is contextual in nature to explore, describe and interpret the experiences of patients with hypertension within a public health system.

1.7 Context of the research

The context of this research was a district hospital situated in the Dr Kenneth Kaunda district in the North West province. The selected district hospital was one of 10 National Health Insurance
Activities regarding the NHI focused on key elements such as district health services, service delivery, strengthening of health systems and health financing (Khumalo, 2016). It serviced four sub-districts, namely Maquassi Hills, Matlosana, Ventersdorp and Tlokwe with a population of 796,823 (South Africa, 2012. National Health Act, 2003 (Act No.61 of 2003) policy on the management of public hospitals. (Government notice no 35101, 2 March). The hospital has 335 beds and provided level one and two services (Gray, et al. 2017). Within this setting, the medical out-patient department (MOPD) was a busy, fully operational department, with medical practitioners, other health professionals and administrators who supported patients reporting for various medical interventions. At this clinic there was a variety of patients who reported with hypertension. This setting was chosen as data obtained from this environment provided an in-depth understanding of the views of patients with hypertension in a public health system regarding their experiences of care, awareness of their self-care, coping strategies and the resources they were aware of, utilised or needed.

1.8 Research methodology

The research favoured a qualitative method (Creswell, 2014:19-21) with an interpretive descriptive approach (Thorne, 2016:13) within a contextual design, outlined hereafter. Interpretive descriptive design (Thorne, 2016:39-41) aligned itself to a constructivist and naturalistic orientation to enquiry with acknowledgement of clinical expertise viewed as a useful starting point. The aim of interpretive description was to generate knowledge relevant for the clinical context of applied health disciplines (Thorne, 2016:57). Thorne (2016:60) described a theoretical scaffolding method that was created by the researcher when the enquiry began that was the initial position from which the design plan was built. This was, however, then challenged as the research progressed (Thorne, 2016:82-83). According to Thorne (2016:59), when initiating interpretive description research, one must know what intellectual position one is taking. This is the first step in the scaffolding process, which also facilitates declaring conflict of interest. If one is open about one’s personal and research agenda, transparency is inevitable. The three basic aspects that needed to be described regarding intellectual positioning were:

- **Who am I?** An educational psychologist who is currently supervising student registered counsellors doing their practicum in a community environment of a district hospital in the Dr Kenneth Kaunda district.

- **What do I represent?** In my professional position I represent the North-West University’s Educational Psychology Subject Group and the profession of educational psychology, and in my scholarly position I represent a student who is enrolled for the Masters in Health Science in Transdisciplinary Health Promotion degree.
• **What am I trying to accomplish?** I have embarked on a research journey that explores the experiences of patients with hypertension, specifically their awareness regarding their care, self-care, coping skills and resource utilisation and needs. This was done in an effort to formulate valuable recommendations for psycho-education as a health promotion strategy to empower patients to practise enhanced self-care practices within a public health system.

• The second step in the scaffolding process consisted of two critical elements. The first element was the review of the literature with which one became familiar with the “state of the science” (Thorne, 2016:60) in relation to the particular problem that was of importance. This knowledge made it possible to confirm or challenge the initial conceptions, obtain insight into the problems, and evaluate the conclusions that were reached. The second critical element in the scaffolding process was what was brought to the research, namely the contributions by the researcher. This required that one realistically positioned oneself with the disciplinary orientation that shaped the research. With regard to this research, the researcher brought personal experience to the research after working as a psychologist in the medical world for 12 years. With this in mind, it is therefore reasonable to assume that the researcher had certain pre-conceived ideas or *priori theories*. A *priori* theory relates to an understanding of how certain things work, is known, formed or conceived beforehand, rather than by situational or real time observation and was the centre or core of the exploration.

• Furthermore, interpretive description did assist in constructing knowledge regarding the effects of choice of designs in relation to the phenomena under investigation; while providing the foundation upon which to rationalise the value of the intended qualitative output (Thorne, 2016:48). Consequently, this research had the potential to deliver a different view on previously accrued knowledge and provided significant contextual comprehension as well as to direct future decisions with regards to the application of evidence (Thorne, 2016:256-262) regarding patients with hypertension within a public health system.

1.8.1 **Target population**

The target population was all the patients with hypertension utilising the services of the MOPD clinic at the selected district hospital. There were approximately 250 patients that accessed this service during a month.

1.8.2 **Sampling**

In order to obtain a true reflection of the population’s experiences of the hospital care, awareness of their own self-care, coping with their hypertension and their resources awareness, needs and
utilisation in a public health system, the sample for the participant group was done in a purposive manner. Purposive sampling is seen as a series of strategic choices about with whom, where and how one does their research (Palys, 2008:697). These strategic choices were done in accordance with specific inclusion and exclusion criteria (Palys, 2008:697). Samples were obtained from the accessible population in the MOPD clinic at the hospital through a mediator who was the MOPD clinic’s operational manager.

1.8.2.1 Inclusion criteria

For this research, the participants who were considered are:

- Adult patients suffering from hypertension (diagnosed by a medical practitioner with chronic hypertension and been diagnosed for at least 6 months). This aspect included participants of all ages, provided they were older than 18 years.

- Adults who were situated (lived) in and around the Dr Kenneth Kaunda district (an area in the North West province which consists of four local municipalities, namely Matlosana, Tlokwe, Maquassi Hills, and Ventersdorp) who utilise the MOPD clinic as the contact point of management of their hypertension.

- Participants had to be able to communicate in either English or Afrikaans as the main language of communication since these two languages are the official modes of instruction within the hospital environment. Furthermore, the researcher, who performed the interviews was only proficient in English or Afrikaans.

- Participants had to be willing to participate voluntarily in individual, semi-structured, digitally audio-recorded interviews when they visited the MOPD clinic and had to be prepared to sign informed consent forms.

1.8.2.2 Exclusion criteria

For the sake of safety and facilitation of access to the patients for the interviews, it was necessary for all interviews to take place on the premises of the selected hospital. There were no limitations or restrictions on age, gender or race of the participants as hypertension is a universal problem, which affects a large variety of patients. Patients were also not excluded if they have additional co-morbidities in addition to hypertension.
1.8.3 Determination of sample size

The sample size of the participant groups (adult patients with hypertension) was determined on the basis of data saturation, which was the point in data collection where rich data was initially obtained but after a while no new data emerged (De Vos et al., 2013:75). Furthermore, an adequate sample size was one that sufficiently answered the research question (O’Reilly & Parker, 2012:192). A sample size of 24 (n=24) participants was therefore established based on data saturation.

1.8.4 Recruitment of participants

Before data collection commenced the researcher obtained goodwill permission from the Chief Executive Officer (CEO) of the selected hospital. Legal permission was obtained from the Health Research Ethics Committee (HREC) (Ethical clearance number: NWU-00079-17-S1), the Faculty of Health Sciences of the North-West University, and the Provincial Department of Health through the National Health Research Database. Thereafter, during the Patient Safety Meeting, held monthly at the selected hospital, the proposal was presented to the board for permission to do the research at the MOPD clinic.

After the relevant permission was obtained, posters (see APPENDIX 1) were displayed at the MOPD clinic in order to canvass for participants. In addition to these posters, leaflets printed in a smaller size were placed at the reception of the MOPD clinic. This increased the opportunity for the maximum number of prospective participants to become aware of the research. The recruitment process was conducted as follows:

- Gatekeeper: the CEO of the hospital acted as the gatekeeper.

- The operational manager was requested to be the mediator. The operational manager, as mediator, was appropriate since the operational manager had access to each patient’s medical background and had a known relationship with the patients as they collected their medicine or arrived for appointments with the medical doctor. An appointment with the operational manager was made and the entire process of the research was discussed. This entailed the following aspects:

  - A detailed review of the research, including the aim and objectives and the method of data collection.
  
  - The inclusion criteria, recruitment process and obtaining informed consent.
The process to be followed when prospective participants require more information and first request to have direct contact with the researcher.

The arrival and queueing of patients at the MOPD clinic for their routine visits, when the mediator explained the research to them.

Patients could also take the informed consent form home to have it signed before the data was collected.

Patients then had sufficient time to ask questions and consider their participation. Patients could either decide the day of their routine MOPD visit whether they were interested, or they could first go home to consider the matter before responding. The MOPD unit manager was requested to decide whether the patients were potential candidates for the study. As she was familiar with these patient’s history she could make an informed decision as to whether the participants could contribute rich data to the study.

The researcher was available at the hospital premises during the time of data collection to answer questions from prospective participants.

Interested participants gave permission to the mediator to give their names to the researcher to make appointments for the interviews either the same day or with the follow up appointment.

Interviews were done on the days that participants had to come to the MOPD for their routine visits while they were queueing to get their blood pressure monitored and medication dispensed.

Participants would, throughout the process, have sufficient time to discuss any aspect of the research with the researcher (telephone numbers were provided on the poster and the leaflets).

1.8.5 Process of obtaining informed consent

Obtaining informed consent implied that all possible or adequate information regarding the goal of the investigation (De Vos et al., 2013:117), the expected duration of the participant’s involvement and the procedures that were followed were discussed. Possible advantages, disadvantages and dangers to which the respondents could have been exposed were highlighted and also explained. Furthermore, the credibility of the researcher (De Vos et al., 2013:117), was also discussed.
All patients with hypertension, accessing services at the MOPD clinic that were interested in participating were required to sign an informed consent in order to participate in this research. Only once they had made their final decision and if they wanted to, were they introduced to the researcher through the mediator. The necessary arrangements were then made for the interviews. Participation was voluntary, and all participants knew that they were at liberty to withdraw from the study at any time (De Vos et al., 2013:117-118) without prejudice. During the day of data collection, the informed consent was obtained by an independent person. This entailed a process whereby the independent person was present with the participant to sign the informed consent together. In the event of a participant that was illiterate, the participant was asked to sign by means of a thumb print and, in this event; a witness was requested to sign as well. The researcher was the final role player to sign the informed consent.

1.8.6 Data collection

When participants were identified voluntarily agreed to participate by signing the informed consent, interviews were done by the researcher. Data was collected by using one-to-one, semi-structured interviews and by completing a demographical survey. This demographic information enabled the researcher to gain a deeper understanding into the participants’ context. When the data was interpreted, the researcher was then be able to relate specific participant responses to the participants’ age and gender. Understanding from which area the participants had to travel to the MOPD, their employment status and occupation illuminated the resources needed for patients when they regularly visited the hospital. The participants’ level of education assisted the researcher to make the language level more accessible to them and directed the researcher to the best possible level of health education that the patient was able to understand as well as the most appropriate psycho-educational strategies. By understanding the patients’ co-morbidities, the realities of taking regular medicine and their occupation, it enabled the researcher to formulate appropriate psycho-educational interventions that enhanced patients’ self-care.

The semi-structured interviews took between 30 and 60 minutes. Semi-structured individual interviews utilised a few open-ended and a few semi-structured questions (Botma et al., 2014:208-209; Creswell, 2014:97-98). Since this study aimed at collecting high quality data through interviews, the data obtained was not simply in the form of posing questions and documenting of responses. It was obtained from a carefully thought out frame of reference, attitude and communication style (Thorne, 2016:135). For this reason, the interview schedule was developed in advance (see APPENDIX 2). The interview schedule was handed to participants before the actual interview to encourage enhanced participation and enable a relaxed interview setting (De Vos et al., 2013:350).
According to Thorne (2016), data collection also requires an encouraging and judgementally-neutral facilitator, allowing the participant to explain and express themselves as fully as possible (Thorne, 2016:139-140). To achieve this the researcher familiarised herself with the interview schedule before data collection started so that the interview process took place in an organised manner (Botma et al., 2014:209), which created a facilitating environment and limited stress and agitation of the hypertension patients. The participants were continually reminded of the purpose of the research, as well as what the interview would entail before each individual interview commenced. Verbal consent was also confirmed for the purpose of digitally voice recording the interview before the interview commenced. Thereafter, the interview started. The researcher was the appropriate person to evaluate and assess these context-specific interpretive descriptive interviews, and to translate the research findings back into practice (Thorne, 2016:279).

1.8.6.1 Development of the interview schedule

When developing qualitative research questions to be used as a data collection tool to collect data during the interviews, there was no one best path to follow. However, there were a few guidelines which were adhered to. For the purpose of this research, the researcher aimed to explore, interpret and describe the experiences of the participants. McNamara (2016) suggested several recommendations that created applicable and relevant questions for the interview schedule, these included:

- Open-ended wording whereby respondents were able to choose their own language when answering the questions.
- Questions were neutral and overtly avoided wording that could influence the participants’ responses.
- Questions were posed one at a time, with clearly worded terms and concepts.
- “Why” questions were avoided as they might have sounded judgemental to the participants.

The interview schedule was reviewed in consultation with other qualified persons as the researcher had to rigorously examine each question in the draft instrument. The review was done in relation to the relevance and appropriateness of each question. The clarity and un-ambiguity of each question was vital to accurately explore the research question. Furthermore, the review also checked for leading and loaded questions. The first interview was used as a trial for the interview schedule and after being transcribed verbatim, adjustments were made, as necessary.
1.8.7 Data analyses

Data collected from the interviews were transcribed and then analysed using thematic analysis. Thematic analysis is a method for identifying, analysing and reporting themes and the relationships between these themes within data. It minimally organises and describes the data in (rich) detail (Braun & Clarke, 2013:4-5). Even though thematic analysis is poorly demarcated and rarely acknowledged, it is still a widely used qualitative analytic method within psychology (Braun & Clarke, 2006:4). In addition, the researcher also made sense of the relationship between different themes according to the interpretive descriptive approach.

Thematic analysis of the data was divided into six (6) phases (Clarke & Braun, 2013:4-5), namely:

- **Familiarisation with the data**: Immersion of researcher in the data in order to become familiar with content.
- **Coding**: Generating labels to highlight important features of the data.
- **Searching for themes**: Themes are coherent and meaningful patterns which are relevant to the research question.
- **Reviewing themes**: Reflection on the themes focusing on nature and relationships of the themes.
- **Defining and naming themes**: Analysing the themes and identifying the essence of the themes.
- **Writing up**: Weaving together the narrative in order to relate a cohesive and persuasive story about the data.

As the essence of this research encompassed experiences of hypertensive patients, the complex interactions between all facets of the situation were considered within this individualised scenario. Interpretive description therefore capitalised on processes such as synthesising, theorising, and re-contextualising, rather than simply sorting and coding. As Braun and Clarke (2013) was used to initially thematically analyse the data, further contextualising and synthesising was done by the researcher keeping in mind Thorne (2016). Furthermore, periods of engagement in the field were combined with periods of immersion in the data, a balance ideally suited to interpretive description. This was accomplished by the researcher between interviews that provided an opportunity for the researcher to totally familiarise herself with collected data. These actions therefore captured subjective themes and patterns as they were generated. With the interpreting
and describing of the data a clinical understanding of the phenomena being explored became evident. Therefore, interpretive description, which requires an intellectual process extending beyond simply collecting and reporting data, was done throughout data collection, acknowledging the analytic processes that occurred in transforming the raw data into findings (Thorne et al., 2004: 9, 13) and resulted in the constructs of an interpretive account of what these themes within the data signified. It is therefore felt that as Thorne et al. (2004:16,18) states as a renewed call for intellectual rigour, coherence and validity emphasising integrity, accountability and coherence within in the research is adhered to and acknowledged, the contextual significance of naturalistic enquiry (Thorne et al., 2004:16,18) is achieved. During this process in which the researcher moved passed the basic investigation process and into the realm of interpretation, as she endeavoured to answer the research question posed in this study. Therefore, as previously delineated, the process of data collection was closely integrated with the process of data analysis and interpretation, keeping with the interpretive descriptive approach.

After the data was collected the researcher again submerged herself in the transcribed information, which promoted an ongoing engagement with the data. This is a strategically iterative process used to confirm, test, explore and expand on the tentative concepts that began to form as soon as the researcher became immersed in the field (Thorne, 2016:134-135). During this second level of analysis, open-, axial- and selective coding were deployed as the researcher aimed to understand and describe the relationships between themes (Thorne, 2016:141-162). Furthermore, the researcher had personal knowledge of the field as periods of engagement in the field had already been experienced. This experience combined with periods of immersion in the data was ideally suited to the interpretive description approach (Thorne et al., 1997:175). The analysed data was also discussed with a co-coder to ensure that consensus was reached. Before any finality of the results (the themes and patterns within the data) was confirmed, consensus was obtained by the research team. Methodological, theoretical and personal field notes were formulated throughout the research process.

Methodological notes indicated the methods used in the research and were kept as a constant guideline. The theoretical notes enabled the researcher to think about the research, the data and making sense thereof, within the available literature, models, frameworks and theories. Personal field notes described the emotions and experiences of the researcher throughout the research (Botma et al., 2014) and provided a personal rendition of the participants' behaviours, attitudes and unspoken interpretations.
1.9 Credibility within the context of interpretive description

Lincoln and Guba (1994) as cited by Botma *et al.* (2014:234) claimed that trustworthiness in research is important when one evaluates the research’s worth. Trustworthiness is composed of certain elements, namely credibility, which is the “truth” of the findings; transferability, showing that the findings are applicable in other contexts; dependability, showing that findings can be replicated; and conformability reflecting neutrality of the research, implying that the findings are shaped by the respondents and not the researcher’s bias, interest or motivation (RWJF, 2016). Thorne does acknowledge these general principles which underlie the above mentioned concepts since qualitative researchers do have a basic agreed-upon idea regarding how the data was generated, the findings arrived at and the conclusions rendered (Thorne 2016: 111). However, interpretative description seeks to access knowledge about human subjective experiences, resulting in applied disciplinary knowledge (Thorne, 2016: 231). It is thus essential that researchers thoughtfully develop quality criteria to assist both the reader of this kind of research as well to guide the researcher who conducts it (Thorne, 2016: 231). Thorne (2016: 232) states: “*It is my hope that we find ways to articulate the intricate blend of artistry and the science that interpretive description represents and thereby render that distinctive perspective increasingly meaningful within the evidentiary context of our disciplines.*”

Thorne also explains this by noting that a researcher has the obligation to anticipate the audience’s hunger to uncritically accept new ways to think about phenomena. Therefore, in order to circumvent this naivety, the researcher must ensure that all claims that are made have been interrogated within the disciplinary logic and practice context of the audience to which they were addressed (Thorne, 2016:112). Furthermore, the quality of health science research should be different from those of more theoretical fields, as health science research exists because of the social mandate that involves moral obligations towards benefitting individuals in the social collective. This extends the researcher’s disciplinary responsibility beyond the evaluative criteria of research and into a wider domain of how the results or findings may reasonably be interpreted or practically used (Thorne, 2016:233).

In conclusion, since interpretive description seeks to access knowledge about human subjective experience, to obtain an appreciation of credibility one must go beyond the adherence of methodological rules and lean more towards examining complex questions of exploring what meanings can be found regarding the findings (Thorne, 2016:233).
1.9.1 Quality considerations of interpretive description

In order to decide upon the quality of research, a more relevant approach to credibility is needed. This would include elements of established evaluation to identify theoretical strength as well as blends of knowledge of the evaluation criteria, with a solid foundation in the disciplinary domain of the knowledge and critical judgement (Thorne, 2016: 232). It is with this in mind that interpretive description demands an expert critique of the qualitative research which requires a broad knowledge of the field in which the research attempts to gain acceptance (Thorne, 2016:232). The researcher’s responsibility extends beyond the reach of traditional evaluative criteria and into the domain of how findings might reasonably be interpreted or even used (Thorne, 2016: 233).

Evaluation criteria typically applied to interpretative description are illustrated in Figure 1-2. These four criteria were applied to the research in the following manner:

<table>
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<th>Evaluation criteria typically applied to the products of interpretive description</th>
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| **Epistemological integrity**  
Defensible line of reasoning from assumptions about the nature of knowledge through to methodological rules regarding the decisions about research process. To be credible, the research process must have a research question that is in line with the stated epistemological stand point, interpretation of data sources and interpretive strategies. |
| **Representative credibility**  
The theoretical claims must be consistent with the manner which the phenomena was sampled. Findings based on a prolonged engagement with the phenomena are more likely to be credible. |
| **Analytic logic**  
This aspect of reasoning makes explicit the reasoning of the researcher from the initial structure through to the interpretations and knowledge based on what was learned in the research. A commonly applied principal is the generation of an audit trail. |
| **Interpretive authority**  
Recognition is given to the perspective bases of knowledge in order to ensure that the researcher’s interpretations are trustworthy, they must reveal some truth external to the researcher’s own bias or experience. “Validity-as-reflective-accounting” is used as a strategy to convince the audience of our version of the truth. |

Figure 1-2: Evaluation criteria of interpretive description (Thorne, 2016)
Epistemological integrity was upheld as the line of reasoning was done from the assumptions about the nature of the knowledge closely aligned to a qualitative methodology (Creswell, 2014:185-187) with an interpretive descriptive approach (Thorne, 2016:11) that explored the nature and experiences of the patients with hypertension within the South African public health system.

Theoretical claims were consistent with the manner in which the participants were sampled with the researcher being engaged over a long period with the patients (the phenomena), this, facilitated representative credibility of the study.

What was already known and further learned by the researcher during the prolonged engagement at the MOPD enabled the researcher to apply analytic logic and actively observe and generate an audit trail in terms of the final data collection and reporting on the phenomena.

The researcher, due to her engagement with the phenomena, already had a perspectival base of knowledge and was able to truthfully interpret the findings. These interpretations also reflected “external truths” (from observations and practical knowledge and from the literature review), which firstly minimised the notion of the researcher’s own bias or experiences being evident and secondly can be considered a motivation to “convince the audience” that the researchers’ interpretations are valid and credible.

1.10 Ethical considerations

The researcher ensured that the research being conducted was not harmful to the participants (Botma et al., 2014:20). Insensitive and intrusive questions that may undermine the participant’s autonomy were avoided (Botma et al., 2014:134). And interviews were carried out in the most sensitive and unobtrusive manner possible. Participants were at all times kept informed of their right to be able to withdraw from the research without prejudice. Furthermore, participation was voluntary and participants were in no way pressurised or coerced into taking part in the study. As previously mentioned, the research only began once ethical clearance was obtained from the Health Research Ethics Committee (HREC) of the Faculty of Health Sciences of the North-West University and the necessary approval gained from the CEO of the participating hospital, National Health Research Database, DoH North West province and the Patient Safety Group of the participating hospital.

The National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (1978) (cited by Botma, et al., 2014:3) compiled the Belmont Report in which three principles relevant to research involving human participants are discussed (Botma et al., 2014:3).
These three principles are: respect, beneficence and justice. The Ethics in Health Research: Principles, Processes and Structures (Department of Health, 2015) further highlights these broad ethical principles: beneficence and non-maleficence, distributive justice (equality), and respect for persons (dignity and autonomy).

1.10.1 Beneficence ad non-maleficence

Beneficence means that one must “do no harm” (Botma et al., 2014:20). However, this must be taken a step further in that one must actually do good and not only eliminate or minimise harm, “maximise benefit and to minimise harm” (Department of Health, 2015:14). Beneficence involves prohibiting deliberate infliction of harm on persons since one should seek to improve the human condition. In this study, by exploring the participant’s views and opinions regarding their care, coping skills and the resources they experience, an awareness can be created of the individual’s life, which can be of benefit to themselves and others.

1.10.2 Justice, distributive justice and equity

The definition of justice is the use of power as appointed by law, honour or standards to support fair treatment and due reward. In research justice indicates that people should be treated fairly (Botma et al., 2014:19). The Department of Health (2015:14) further distinguishes justice as distributive justice or equality. Interpreted, it means a “fair balance of risks and benefits among all role players involved in research, including participants, participating communities and the broader South African society” (Department of Health 2015:14). Therefore, equality relates to the concept that no section of any population should be unduly burdened or denied the benefits of knowledge derived by the research. In this research all participants were be treated fairly with no overt risks identified and no undue burden on any section of the population and no one who participated was denied the knowledge derived by the research.

1.10.3 Respect, dignity and autonomy

Respect requires that a person’s autonomy is valued and revered, and those with diminished autonomy are protected (Botma et al., 2014:17). Interpretive description studies rarely involve the potential for bodily harm or high-risk activity, it is fundamental premise of modern research that the information that participants provide must be used in such a manner that their interests and needs are respected (Thorne, 2016:117-118). The Department of Health (2015:14) states that “a person capable of deliberation about their choices must be treated with respect and permitted to exercise self-determination”. By the very nature of this statement it is implied that “persons who lack capacity or who have diminished capacity for deliberation about their choices must be
protected against harm from irresponsible choices”. Therefore, respect recognises and acknowledges dignity, well-being and safety of all participants and the researcher has the moral obligation to protect the participants in their research and ensure that their interests outweigh the interests of science (Department of Health, 2015:14).

In this research the researcher’s ethical affiliation to her profession and the signed researcher code of conduct held her responsible to uphold the respect, dignity and autonomy of all participants. Furthermore, the researcher always informed the clinic manager or unit manager of the progress of the research in order to comply with protocol and was humble and respectful to the staff assisting with the research. All patients were dealt with in a respectful manner, and their circumstances, age and condition were considered by the researcher doing the interviews. To ensure participants were willing to participate and did not feel pressurised in any way, a mediator was used to promote communication between the participants and the researcher which reflected the researchers respect for and the dignity and autonomy of all participants.

1.10.4 Relevance and value

The relevance of this research lay in the development of psycho-education as a health promotion strategy, which empowered patients with hypertension to practise enhanced self-care in the current South African health system that is unable to cope with the high disease burden.

A definite self-care strategy for patients is essential since there is insufficient information about how patients experience care, their knowledge of self-care, how they actually cope with their disease and their awareness of their needs and their use of resources. This research enabled the research team within the Master in Health Sciences in Transdisciplinary Health Promotion to generate a psycho-educational health promotion strategy for the enhancement of patients’ self-care.

1.10.5 Scientific integrity

This research design has been approved by the Scientific Committee of the Africa Unit for Transdisciplinary Health Research (AUTHer) and therefore it can be confirmed that the proposed methodology was appropriate to address the research questions. In addition, the researchers were all PhD-qualified. Through continuous monitoring, the research supervisors ensured adherence to the methodology.
1.10.6 Role player engagement

The utilisation of the Patient Safety Meeting and the operational manager of the selected hospital enabled support from the hospital. The researchers also had regular conversations with all role players to ensure that the participant recruitment and the outcome of the research was an appropriate and constructive process to all involved.

1.10.7 Favourable risk-benefit analysis

This research risk level is medium, as the probability of harm or discomfort in this research is not greater than what the participants would have encounter in their usual visits to the MOPD clinic. All participants were adults who were diagnosed with a hypertension and this group was not considered as a vulnerable population. However, many patients with hypertension were elderly, which can be considered a vulnerable population. Therefore this aspect was carefully considered and the necessary precautions taken. Precautions included, among others, breaks during the interviews and providing something to drink. The information that was collected focused on exploring and understanding the care, coping of patients with hypertension and the knowledge and experience they had of the available resources in the public health system.

There were no physical risks foreseen for the participants, as the participants (the patients) were in a medical surrounding with medical support at hand, routinely attending their clinic. No psychological uneasiness was encountered during the interviews.

1.10.7.1 Direct and indirect benefits

There were no direct benefits for participants. Indirect benefits were evident in the knowledge that was obtained by the participants in building the science of health promotion through psycho-education towards enhanced self-care. A better understanding into how to empower patients (participants) with hypertension to implement enhanced self-care has enriched the ICDM model of South Africa.

1.10.8 Fair selection and participation

Any adult patient with hypertension, irrespective of their gender, sexual orientation, disability, education, pregnancy, marital status, social or ethnic origin, belief, conscience or religious beliefs (Department of Health, 2015) was invited to participate. Recruitment was conducted by means of a mediator who, as the operational manager, had access to the whole population of participants. In addition, posters and flyers were provided on the hospital’s premises to ensure that all prospective participants were aware of the ongoing research. The inclusion and exclusion criteria
indicated, however, that patients younger than 18 could not participate. In addition, the interviews were conducted in English and Afrikaans (as these were the language of instruction according to the hospital’s language policy). Therefore, participants who could not speak either Afrikaans or English were not included. However, the researchers experienced that the use of Afrikaans and/or English were sufficient modes of instruction within the MOPD to obtain the desired results. Only patients that have lived the realities of having hypertension and being dependent on the public health systems were able to truly provide the necessary information to elucidate the research questions.

1.10.9 Permission and informed consent

The aspect of permission and informed consent underpins the requirement that a person must choose voluntarily whether to participate in research on the basis of the information given, information that provides the participant with the knowledge enabling them to make an informed choice (Department of Health, 2015:23). As stated previously, permission to execute the research was obtained from the CEO of the hospital in Dr Kenneth Kaunda (DKK) district, the Patient Safety Committee that served as an ethical platform at the hospital and Provincial Director: Research, policy, implementation, monitoring and evaluation of the Department of Health, North West province. Besides obtaining permission on these higher levels, ethical consideration was also given to the actual participants by requesting all participants to sign informed consent forms with an independent person (MOPD clinic sister) after they had engaged with the mediator (the MOPD unit manager) at the MOPD clinic and confirmed their willingness to participate.

1.10.10 Privacy and confidentiality

Having respect for persons also required the researcher to pay attention to the issues of privacy and confidentiality. “Privacy describes the person’s interest in controlling access to her personal information” (Department of Health, 2015:22). Confidentiality on the other hand relates to “whether and how research data might be disclosed carelessly or inadvertently” (Department of Health, 2015:22). Therefore, if the researcher was not careful and revealed any detail that could be an identifying factor, it would make the participant vulnerable to harm. In this study, all interview data and research information remained confidential. There were no identifying details evident on the transcriptions and original voice recordings. Voice recordings were erased as soon as the transcriptions had been completed. All participants were allocated numbers and there was no connection between these numbers and any identifying details.
1.10.11 Respect for participants

The researcher acknowledges that “a fair rate of reimbursement should be calculated using the Time, Inconvenience and Expenses (TIE) method to determine the cost to participants for time expended, inconvenience and refreshments associated with research participation” (Department of Health, 2015:21). As clinic patients were required to sit for long periods waiting for the doctor, being able to interact in a constructive manner with someone who was willing to listen to a patient was usually seen as positive. Therefore, in order to break the monotony of the long waiting period, the interview with the researcher was welcomed. As the participants were already at the clinic, there were no monetary or other reimbursements given to them. However, refreshments were served to participants during and after the interviews.

1.10.12 Researcher expertise and competence

The researchers approached this research as a team, consisting of Dr Lynn Preston, a PhD-qualified educational psychologist with more than two decades experience within health systems; Prof Petra Bester who has supervised almost 40 Masters’ degree students and holds a strong interest and practical experience in both qualitative research methodologies and strengthening of health systems; Prof Lanthé Kruger who is a cardiovascular physiologist with ample experience in understanding the disease burden of hypertension; and Prof Ronel Pretorius, a clinical nursing specialist who holds a clear understanding of the care associated with the management of hypertension within public health systems.

1.10.13 Data management

Data was stored on a password-secured computer in the lockable office of the supervisor, on the premises of the NWU. As the data are of a psychological nature it will be stored for a period of six years, as specified by the Health Professions Council of South Africa. As soon as the data was transcribed it was deleted from the recorders. Only the study supervisor had access to the recordings which remained on a password protected computer in her office on the premises of the University, where after all data will be destroyed whether it be hard copies or electronic format. Electronic format was protected on a password protected computer and after the research stored on a password protected USB stick in the office of the supervisor, on the premises of the NWU.

1.10.14 Dissemination of research results

Participants were asked to indicate if they wanted feedback from the researcher on the research results. Dissemination happened as three separate processes:
• Firstly, the researcher provided a brief summary of the research results to the participants in the form a user-friendly brochure.

• Secondly, the researcher presented the research findings to the Patient Safety Committee of the hospital.

• Thirdly, the researcher submitted a manuscript of the research results to the scientific community.

1.10.15 Role of the members in the research team

The researcher was the person who oversaw the interviews performed. The researcher also performed the initial data analysis. The supervisors were involved with the research in an advisory capacity and also as a second opinion regarding the data analysis.

1.10.16 Conflict of interest

As the researcher works at the hospital as the primary liaison person between the two main role players (NWU and the hospital), a conflict of interest regarding the research was evident. However, as the researcher only plays an administrative role and does not have any professional involvement with the MOPD clinic, the conflict of interest was averted. Secondly, the researcher was not part of the recruitment of the participants, she only conducted the research interviews.

1.11 Format of the research report

The structure of this research has been reported in an article format. The report has therefore begun with an introduction/overview of the research topic, which provided the reader with a background to the research including the problem statement and research question (Section 1). The theoretical frameworks, research design and methodology were also described (Section 1). In Section 2 a literature review was done to fully inform the reader of the theoretical framework that the study was based on. Section 3 consists of the manuscript which deals with the application of the middle-range theory of self-care by Riegel et al. (2012), in hypertensive patients within the South African health system. Finally, in Section 4, the conclusions, evaluations and recommendations will finalise the research.

1.12 Summary

Within Section 1, the introduction and overview of the research was expounded, highlighting a gap in the system that identified hypertensive patients needing more care. Specifically, it was
noted that if these patients could enhance their self-care, they would lighten the burden of this disease within the health system and empower themselves to take more responsibility for their health. Furthermore, it was suggested that educational psychologists, by means of psycho-educational interventions, could be the answer to this effort. In Section 2 the theoretical background to the study will be reported, in order to ground the study in a solid framework of current knowledge, understanding and occurrences.
BIBLIOGRAPHY


SECTION 2: LITERATURE REVIEW

There is no picturesque version of what self-care looks like; it's different for every person who wants to practice it. (Jenna Wortham, 2018).

2.1 Introduction

Within the realm of cardiovascular disease, hypertension is the world’s biggest killer, accounting for about 15 million deaths in 2015. It has remained the leading cause of death globally for the last 15 years. (WHO, 2017; Motlagh et al., 2016). Hypertension is not only the biggest killer but also a silent killer, which can ironically be prevented or, at the very least, controlled through engaging in healthy practices resulting in individuals still being able to live a fulfilled and productive life (Doubova et al., 2017:51). Self-care is considered to be the essence and of utmost importance in managing any chronic disease and it is no different when it comes to hypertension (Kear, 2015; Motlagh et al., 2016; Strömberg, et al., 2012). Self-care is a process of maintaining health through health promoting practices, symptoms monitoring and management (Jaarsma et al., 2013:114). This literature review aims to inform the reader as to the theoretical origins of the self-care concept, the various issues regarding self-care, the need thereof in the current South African public health systems and the implementation of self-care in the South African context, as applied to the realities of hypertension.

2.2 Orem’s grand theory of self-care

During the 1970’s a group of major grand theorists focussed their nursing practice in two areas, firstly, to understand their patients and, secondly, to see how nurses could promote their patients’ growth and health. Dorothea Orem was one of these theorists. Orem’s general (grand) theory of nursing focused on three related parts, namely the theory of self-care, theory of self-care deficit and theory of nursing system (George, 1995:100) (see Figure 2.1). Self-care (dependent care) was defined by Orem (1985) as the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health, and well-being (Orem, 2001). The actual actions involved in self-care can therefore range from the very basic ability of
remembering to the specific action that involve meeting specific self-care demands or requirements, such as taking medication at the same time every day.

Orem (1985: 245) defined self-care agency (SCA) as the “complex acquired capability to meet one’s continuing requirements for care of self that regulates life processes, maintains or promotes integrity of human structure and functioning [health] and human development, and promotes well-being” (Orem, 1985:254).

![Diagram of Orem's grand theory of self-care deficit nursing theory](image)

**Figure 2-1:** Presentation of Orem's grand theory of self-care: deficit nursing theory (adapted from Mclaughlin-Renpenning & Taylor, 2003)

### 2.2.1 Theory of self-care

The theory of self-care is derived from Orem's grand theory of self-care deficit of nursing (Orem, 1985:254). As previously mentioned, the self-care theory is one of the three (3) interrelated theories in Orem’s grand theory. Concepts that are covered within this sub-theory stem from four conceptual elements, namely self-care requisites; self-care measures of practice; self-care behaviours of individuals in a reality situation and self-care systems of individuals in a reality situation (Mclaughlin-Renpenning & Taylor, 2003:217). In order to develop areas of knowledge specific to self-care, Orem (1985 as cited Mclaughlin-Renpenning & Taylor, 2003:217) structured the theory around three concepts, namely, self-care requisites; therapeutic self-care demand and self-care operations (Mclaughlin-Renpenning & Taylor, 2003:217). See Figure 2.2.
Generally speaking, self-care is the grouping of activities that an individual initiates or performs on their own behalf in order to maintain life, health and well-being (George, 1995:101). More specifically, self-care requisites are actions directed towards self-care and self-care demand. The total sustained operations and actions performed to meet self-care requisites and self-care agency (operations) is the human ability for engaging in self-care when age, developmental stage, life experience, cultural and resources are considered (George, 1995:101). If these aspects are performed effectively, they help maintain structural integrity and human functioning, and contribute to human development (George, 1995:101).
2.2.2 Orem’s theory of self-care applied to hypertension

When we relate the self-care activities from Orem's self-care theory (1985) to hypertension, one can see that any action directed by hypertension patients towards trying to manage their disease can be considered purposeful actions initiated to bring about a desirable or valued result. For example, maintaining a balance between exercise and relaxation over a period would create stability in the person's lifestyle, which is desirable and valued. This, in turn, promotes health and well-being for the patient. This can be seen as a self-care requisite. Secondly, self-care demands that a patient performs actions that add to supporting the self-care requisite, for example, reducing salt intake while continuing to exercise and increase water intake is assumed to valid and reliable way to meet the self-care requisite of exercising. Finally, individuals who perceive the exercise and diet changes to be desirable, good and beneficial, will maintain these changes even though they are, at times, not really motivated to do so. This maintenance is what we call self-care agency or operations (George, 1995:101).

Middle-range theories, which connect theoretical aspects with practice, are derived from this grand theory. These theories will now be discussed, using Riegel et al.’s middle-range theory of self-care in chronic illness (Riegel et al., 2012).

2.3 The middle-range theory of self-care

Orem’s theory is referred to as a grand theory (Jane et al., 2008:19). Grand theories are abstract theories that mirror the order and arrangement of concepts, rather than providing an understanding of society (Jane et al., 2008:18). From this grand theory, a middle-range theory evolved that provided the link between theory and practice (Jane et al., 2008:19).

Self-care is considered essential in the management of chronic illness (Riegel et al., 2012:3) since it reduces people’s need for health services, rendering these services more sustainable and offers people more control over their lives (Morgan et al., 2016: 243). Riegel's theory of self-care includes three main concepts. The first concept is self-care maintenance, which addresses the process and actions of the patient, improving the well-being of the individual, preserving their health, and maintaining emotional and physical stability (Riegel et al., 2012:6). The second concept is self-care monitoring, a routine that focuses on vigilant body monitoring, surveillance, or simply put “body listening” (Riegel et al., 2012:6). Monitoring is a normal human behaviour and in reflecting on self-care regarding a chronic illness, it is seen is a routine procedure that produces the best outcomes (Riegel et al., 2012:7). The third concept is self-care management, which involves an evaluation of changes in the physical and emotional experiences within the patient’s
body (Riegel et al., 2012:7). The change must be noted in order to decide if action is needed to compensate and adjust to the changes. Refer to Figure 2.3 in this discussion.

![Figure 2-3](image)

**Figure 2-3** A graphic presentation of the three main concepts of self-care (adapted from Riegel, et al., 2012).

### 2.3.1 Theoretical assumptions regarding self-care middle-range theory

The premises accepted in this theory include the following three assumptions (Riegel et al., 2012:12):

- Self-care that occurs in association with chronic illnesses is confined to and influenced by others.

- Decision-making requires the ability to focus one’s attention, to think and have sufficient capacity to understand and weigh up information.

- Acknowledge that patients with co-morbid conditions may be in conflict when self-care is considered for each illness separately.

### 2.3.2 The seven propositions that are proposed for the middle-range theory of self-care

The seven testable or predictable propositions are as follows (Riegel et al., 2012:12):
• There are core similarities in self-care across different chronic illnesses.

• Personal experiences in the chronic illness increase the quality of self-care.

• Self-care is a learned process and success is based on the individual’s ability to reflect.

• Misunderstandings, misconceptions and lack of knowledge all contribute to insufficient or inadequate self-care.

• In order to master the less complex issue of self-care maintenance, self-care management must initially be mastered. This is important as self-care management requires more decision-making aspects.

• Self-care monitoring, which requires “body watching” for signs or symptoms that have changed, is required before self-care management can occur as one cannot make a decision about change unless the situation has been initially noticed and evaluated.

• Evidence-based self-care results in better outcomes.

2.3.3 Factors that either hinder or promote self-care

There are various factors that will either hinder or promote self-care.

*Experience and skill:* Experience of a problem is a powerful contributor to developing a coping skill. Experience with a situation helps one develop patterns and cues that present you with outcome options, specific responses, indicate reasonable goals and optional actions the next time the situation presents itself. Skill and experience are, therefore, essential for self-care, so that patients will develop the ability to plan, set goals and make decisions about their hypertension (Kear, 2015:181; Riegel et al., 2012:14). Therefore, healthcare professionals need to identify what patients know about their illness, what they have already learned through experience, and then they need to discern which of this information is indeed correct. Thereafter, the healthcare professional must proceed to facilitate the development of new skills that are necessary to enhance the patient's self-care performance (Riegel et al., 2012:14).

*Motivation:* Motivation is the force that drives a human being into action to achieve their goals. Either intrinsic motivation (motivation from pleasurable desires within the individual) or extrinsic motivation (motivation from outside, outcomes the individual experiences), can assist or inhibit self-care actions.
Cultural beliefs and values: In some countries or cultures self-care is seen as highly important (Riegel et al., 2012:15) as independence is valued. On the other hand, where love, attention and concern is a high priority, self-care will be of less importance, as others will take the leading role in caring for their family members.

Confidence: Confidence is having belief in oneself and it is an attitude that strongly influences self-care (Riegel et al., 2012:15). Confidence is seen as the ability to perform self-care.

Habits: These daily routines are important as many individuals get accustomed to performing certain behaviours which then naturally become part of their daily self-care routines (Riegel et al., 2012:16). Those who are most successful in self-care are willing to impose behaviours on themselves until these behaviours evolve into habits over time (Riegel et al., 2012:16).

Functional and cognitive abilities: To be able to practise self-care behaviours one must have the functional and cognitive capacity to be able to take on this task. Any emotional or physical challenges do make self-care efforts more difficult and at times even impossible (Riegel et al., 2012:16).

Support from others: Very often self-care involves others, chronically ill individuals usually acknowledge the essential contributions made by family and friends (Riegel et al., 2012:16).

Access to care: Self-care that a patient performs regarding their chronic illness is usually encountered within a framework of health care providers or health systems (Riegel et al., 2012:16). Guidance is usually obtained from the community, government, close family and friends. Therefore, access to medical care is usually a combined effort of all role players.

It is with the above mentioned concepts in mind that the middle-range theory will now be discussed in direct relation to patients with hypertension.

2.4 The concept of self-care in patients with hypertension

“Self-care is learned within the context of social groups by human interaction and communication” (Orem, 1985).

Hypertension is easy to diagnose but challenging to manage and control, resulting in multi-factoral treatment management with patient-centred approaches being the most successful (Kear, 2015:181). An inter-professional healthcare team is needed to manage hypertension, with the patient, the family, friends and healthcare providers all collaborating to offer guidance, education and support in order to ensure the patient successfully manages their condition (Kear, 2015:181). Hypertension is a life-long condition, where long-term adherence to medication and lifestyle
changes are essential (Kear, 2015:182-183). Therefore, if patients have a clear idea and correct perceptions about their hypertension, they will be more likely to make appropriate decisions regarding their actions and decisions about self-care (Ladda, et al., 2016:13). Furthermore, perceptions about one’s illness influence personal behaviours in response to a health threat, such as following treatment regimens and changing lifestyles (Ladda, et al., 2016:13).

Evidence suggests that when patients are fully engaged in decision-making regarding their health and care, patient satisfaction rises with improved healthcare and lower costs (Kear, 2015:182) indicating that a patient-centred approach is beneficial to all role players. However, to achieve patient self-involvement and appropriate self-care behaviours, various aspects must be adhered to by the patient, namely, medication compliance, regular physical exercise, healthy diet and other lifestyle changes, which would include lowering alcohol intake and smoking cessation (Doubova et al., 2017:52). Adherence to any self-care behaviour generally reflects about a 60% compliance by patients, suggesting that it is not that easy for patients to complete and sustain the required self-care tasks (Doubova et al., 2017:52).

Due to the chronic, progressive nature of hypertension, patients suffering from this disease are at an increased risk for developing emotional disorders (Doubova et al., 2017:52; Footman, et al., 2013:548) that may affect their adherence to self-care. The emotional burden due to frustrations regarding the persistent symptoms and the continual need for self-care creates patient distress (Doubova et al., 2017:52). In their study, Doubova et al. (2017:62) comment that a high prevalence of hypertension-related distress is associated with lack of regular physical activity and low intake of fruits and vegetables, which directly impact patient self-care. It is with this prolonged burden that the disease erodes the patient’s positive physical and mental status, negatively influencing the patient’s will and determination to perform self-care routines. To further monitor and support the patient, Kearn (2015:183) suggests three (3) sub-principles regarding self-care behaviours, namely:

- Self-management principles should be included in treatment plans.
- Patient and family education should be culturally sensitive, economically sensitive and based on the patient’s level of understanding.
- All patients should be assessed for barriers to adherence and self-care (management).
- Self-management principles should be included in treatment plans.

By introducing the aspects of treatment plans, family, education, culture economics and assessment, a more holistic and comprehensive outcome can be achieved regarding the
hypertensive patient. Furthermore, there are five main socio-demographic characteristics that influence hypertensive self-care (Motlagh, 2016:2). These are: age, sex, income, educational level and household income. These coupled with further risk factors, such as family history of hypertension, monitoring of blood pressure, history of co-morbidities, weight and finally the actual self-care activities that the individual partakes in (Motlagh, 2016:2) also play a major role in hypertensive patient self-care. As these factors reflect demographic, anthropometric and biochemical factors in any large population (Maryam, et al., 2017:88), they are generally associated with hypertension. However, the most noteworthy are: age, gender, family history of hypertension, smoking status, lipoprotein-a, triglycerides (TG), uric acid, total cholesterol (TC) and body mass index (BMI) (Maryam, et al., 2017:88; Swanepoel et al., 2015:1480). Therefore, having identified these characteristics and risk factors, solutions can be found and implemented, beginning with empowering patients. Empowerment of patients can be defined as a process and an outcome that gives an individual a sense of achievement and control over their own life (Shin et al., 2016:213). It enhances an individual’s self-confidence through the attainment of knowledge, skills, and by facilitating active participation by the individual in strong social support networks, resulting in individuals making healthy choices, being proactive and developing positive relationships with healthcare providers (Shin et al., 2016:213). High levels of self-care (also referred to as self-efficacy) indicate the individual’s confidence in actively managing their hypertension and includes regular exercise, maintaining a low sodium diet, weight control monitoring, stopping smoking or at least, smoking less, healthy drinking and regular blood pressure monitoring (Shin et al., 2016:215). It is therefore argued that self-care is as much an intrapersonal as an interpersonal process.

2.5 Self-care for patients with hypertension in the South African context

In South Africa, hypertension constitutes a significant encumbrance to the burden of disease already experienced in South Africa, especially with few patients achieving adequate levels of control (Murphy, et al., 2015:303). With the responsibility for the management of the majority of patients with non-communicable diseases like hypertension, the risk and responsibility mainly falls on the public sector, which relates to the PHC (Murphy, 2015:304). These services are delivered mainly at a community level (local PHC clinics) and district level. At district level, hospitals support and care is mainly nurse-driven (Murphy, 2015:304). However, the Department of Health is proposing a shift to a patient-centred model of chronic care (the integrated chronic disease management or ICDM) model (Department of Health, 2011). This model empowers patients to play an active role in self-management by enhancing their knowledge, motivation and skills (Murphy, et al., 2015:303), as well as encouraging patients to adhere to medication, keep clinic appointments, participate in regular exercises and adhere to recommended dietary and
lifestyle changes (Webber et al., 2013:2). In order to achieve this goal, there are two documents that the Department of Health have initiated to assist the clinicians, health care professionals and the health care systems. These documents are the Integrated Chronic Disease Management Manual (ICDMM) (Department of health, 2014) and the Standard Treatment Guidelines (STG) and Essential Medicines List (EML) for South Africa (Department of health, 2017).

2.5.1 The challenges of non-compliance with the guidelines given by the Department of Health in South Africa

The ICDM model (based on a PHC approach) aims at empowering the individual to take responsibility for their own health (Department of health, 2014), and pertinently refers to self-management. It is with regard to this aspect that a strong link is seen to the middle-range theory of self-care of chronic illness by Riegel et al. (2012), which incorporates self-management as one of three main concepts in the framework of self-care. The Standard Treatment Guidelines and Essential Medicines List for South Africa (Department of health, 2015 & 2017) is a basic medical guide that informs medical practitioners on the treatment and essential medicines that should be used in the treatment of diseases. This would be a good starting point for patients to take the responsibility of self-care into their own hands and comply with these basic guidelines.

2.5.2 Standard Treatment Guidelines and Essential Medicines List for South Africa (2015)

The Standard Treatment Guidelines and Essential Medicines List for South Africa (Department of health 2015) is an official publication of the Department of health specifying the standards that are set out in treating and medicating chronic diseases. These South African guidelines for the management of hypertension are rarely followed in South African public hospitals (Webber et al., 2013:2) as most patients who use the public healthcare system usually originate from poor socio-economic groups and are poorly educated. This results in a poor knowledge of hypertension and an inability to manage the illness as well as these patients not following a sensible lifestyle (Webber et al., 2013:3). Further common barriers that are experienced in the provisioning of care that impact patients’ self-care are the lack of time for education and counselling, lack of training in appropriate communication skills, the lack of educational resources and aids as well as the lack of continuity in care (Murphy, 2015:308). Therefore, when comparing these above-mentioned barriers that are encountered, a significant difference is noted according to the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015) in terms of treatment regimens and ICDM. Tables 2-1 to 2-4, below, provide examples of non-compliance that occur in
terms of the management of hypertension that is given in the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015).

Table 2-1: Key points given in the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015): Examples of non-compliance – a reality check

<table>
<thead>
<tr>
<th>Key Points</th>
<th>Examples of non-compliance (A reality check)</th>
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<tbody>
<tr>
<td>Hypertension control has a significant benefit for patients (Department of health, 2015 &amp; 2017).</td>
<td>Many individuals do not have the knowledge or are even aware of their hypertensive status (Gómez-Olivé et al., 2017:84) resulting in a general low awareness, low follow up and low adherence levels after the initial diagnoses has been made (Rheeder et al., 2016:224). The overall adherence to the guidelines by doctors, specifically in rural district hospitals, reflects even poorer commitment. For example, in the Bojanala district in the North West province (Adedeji et al., 2015:1), 46.7%, of the doctors demonstrated complete adherence, 5.2% partial adherence and 48.1%, non-adherence to these guidelines (Adedeji et al., 2015:6). This situation has an impact on the patient’s ability to control their BP as there is no basic standard being is followed. In essence, a patient’s self-care and self-management, which results in hypertension control, is important for behaviour change and disease management.</td>
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<tr>
<td>Detect and treat co-existing risk factors (Department of health, 2015:3.27).</td>
<td>With the rising prevalence of chronic diseases, healthcare systems are facing major challenges and South Africa is no different (Folb et al., 2015:647). Even though multi-morbidity seems to be presenting more often with people with chronic diseases, health systems tend to be focused only on the individual disease. In the study of Folb et al. (2016) of PHC patients in the Western Cape in South Africa, the need for PHC services to provide better integrated care is highlighted and the importance of clinicians to consider potential coexistence of, and interactions between, diseases is emphasised (Folb et al., 2015:647). By this study accentuating this need one can note that PHC clinics are not addressing this aspect of multi-morbidity of diseases in patients, resulting in fragmented support which therefore does not promote detecting and treating co-existing risk factors. In effect, this situation contradicts the essence of the guidelines regarding the control of hypertension, assessing for co-existing risk factors and educating for lifestyle changes.</td>
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<tr>
<td>Assess cardiovascular risk (Department of health, 15:3.27).</td>
<td>Hypertension, strokes and ischaemic heart disease are among the most common chronic diseases that cause premature adult deaths in South Africa (Ntuli et al., 2015:1). However, hypertension remains the most common life threatening risk factor for cardiovascular disease (Ntuli et al., 2015:4). Therefore, given the importance of blood pressure control in reducing the risk of cardiovascular disease, there is a dire need for promoting blood</td>
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<tr>
<td>Key Points</td>
<td>Examples of non-compliance (A reality check)</td>
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<tr>
<td>pressure screening and monitoring at local clinics in an effort to assess cardiovascular risks.</td>
<td>From the patient’s point of view, Murphy et al. (2015:303) suggest that many patients experience barriers to efficient and successful self-management, due to factors such as resistance to behaviour changes, inadequate health literacy, a lack of self-confidence as well as the apparent lack in social support. There is evidence that a large majority of patients report that they do not get adequate information or counselling regarding their illness and do not have access to quality support from their healthcare providers. (Murphy et al., 2015:303). It is with this in mind that when considering lifestyle modification as an essential key element in the guidelines of the treatment regimens, more effort must be made to close the gap between the guidelines and reality of the everyday situation.</td>
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<tr>
<td>Lifestyle modification is essential (Department of health, 2015:3.27).</td>
<td>Patient education should be conducted (Department of health 2015:3.27). Therefore, regarding educational programmes, there is a need to target health care workers to ensure that their attitudes and behaviours change regarding the provision of quality services to patients (Ameh et al., 2017:264) as well as general patient education, which would enhance self-care. However, low-income patients with hypertension who tend to present with generally low levels of formal education, are the majority of patients who attend public sector PHC clinics (Folb et al., 2016:1244). Therefore, patients and clinic factors influence blood pressure control and the treatment at (PHC)clinics of both these factors can be associated with blood pressure control problems (Folb et al., 2016:1244). Findings highlight the importance of reaching out to poor rural communities with messages regarding the impact of diet, smoking and alcohol consumption on general health (Maimela et al., 2016:15), actions which are not currently being focused on.</td>
</tr>
<tr>
<td>Patient education should be conducted (Department of health 2015:3.27).</td>
<td>Goals of treatment (Department of health, 2015:3.28), aim for systolic BP of &lt; 140mmHg and diastolic BP of &lt; 90 mmHg. In South Africa, the prevalence of hypertension is estimated to be 21% in people aged ≥15 years (Folb et al., 2016:1241). In Folb et al.’s (2016) study of 38 public sector primary care clinics in the Eden District and two Overberg sub-districts in the Western Cape, South Africa, where the profile of patients who attend these primary health care facilities are low-income patients with generally low form of education, revealed that patient results showed most of these patients presented with uncontrolled blood pressure (Folb et al., 2016:1241). From this study one can see that the reality of the situation does not reflect the ideal goal set out in the Standard Treatment Guidelines of BP (Department of health 2015). Finally, Siko et al. (2017:76) note that during their study done in the Kenneth Kaunda district in the North West province, self-reported studies revealed that doctors demonstrate an inertia to act on elevated BP, despite their awareness of the STG and EML for South Africa (Department of health, 2015).</td>
</tr>
</tbody>
</table>
In the following general section of the Standard Treatment Guidelines and Essential Medicines List for South Africa (Department of health 2015), further prerequisites are delineated, which request that all persons with hypertension should be encouraged to make lifestyle changes applicable to the individual (Department of health 2015: 3.29). In Table 2-2, specific non-compliance in this area is highlighted.

Table 2-2: General Measures as noted in the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015) regarding lifestyle changes in hypertension: A reality check that identifies the non-compliance specifically regarding lifestyle modification

<table>
<thead>
<tr>
<th>General measures</th>
<th>Examples of non-compliance (A reality check)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle modification</td>
<td>Magobe <em>et al.</em> (2017:1) explicitly states that findings of their participants (patients) show that many of them experienced poor self-care due to poor self-efficacy. This finding was highlighted by participants not engaging in regular exercise, having uncontrolled BP and cardiovascular complications all stemming from their hypertensive illness.</td>
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<td>(Department of health, 2015:3.29)</td>
<td>Adherence to these requests are lacking since these lifestyle risk factors for non-communicable diseases are still major public health problems. These include a high percentage of men using tobacco and alcohol (Maimela <em>et al.</em>, 2016:5), a high prevalence of overweight, older females (Maimela <em>et al.</em>, 2016:8) and inadequate fruit and vegetables consumption (defined as less than five servings a day, and translates to 80% of adults aged over 15 years that eat fewer fruit and vegetables than recommended) (Maimela <em>et al.</em>, 2016:5).</td>
</tr>
<tr>
<td>• Stop smoking.</td>
<td>The prevalence of risk factors for non-communicable diseases, such as smoking, alcohol consumption, low fruit and vegetable consumption and physical inactivity is high (Maimela <em>et al.</em>, 2016:14) reinforcing the failure of the population to adhere to these general measures specified in the Standard Treatment Guidelines and Essential Medicines List for South Africa (Department of health, 2015).</td>
</tr>
<tr>
<td>• Maintain an ideal weight (BMI &lt;25kg/m²).</td>
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<tr>
<td>• Weight reduction in overweight patients.</td>
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<tr>
<td>• Restrict salt intake.</td>
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</tr>
<tr>
<td>• Increase potassium intake from fresh fruit and vegetables.</td>
<td></td>
</tr>
<tr>
<td>• Reduce alcohol.</td>
<td></td>
</tr>
<tr>
<td>• Follow a balanced eating plan.</td>
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<tr>
<td>• Regular moderate exercise.</td>
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The final section of the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015) specifies medicine treatment and the process of referrals regarding the management of hypertension. In this section, patients are prescribed medicine according to the presence of four (4) compelling indications, namely, severity of the BP, the presence of target
organ damage, cardiovascular factors and associated clinical conditions (Department of health, 2015:3.29). Table 2-3 highlights the non-compliance regarding medicine treatment of South African patients.

**Table 2-3:** General Measures as noted in the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015) regarding medicine treatment of hypertension: A reality check that identifies the non-compliance of medicine treatment:

<table>
<thead>
<tr>
<th>Medicine treatment</th>
<th>Examples of non-compliance (A reality check)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check adherence.</td>
<td>The adherence to hypertension guidelines in primary care by healthcare workers in general is sub-optimal (Siko et al., 2017:72). With this study recommendations were made that continuous professional development in terms of diagnosis, drug and non-drug management was essential (Siko et al., 2017:76).</td>
</tr>
<tr>
<td>• Monitor patients monthly until target BP is reached.</td>
<td>It is estimated that only 60% of patients adhere to their medication regime (Ramaano et al., 2015:414). This can be interpreted as 1 in 5 participants that do not comply with their anti-hypertensive medication regimen (Ramaano et al., 2015:420).</td>
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<tr>
<td>• If target BP is achieved patients can be seen at 3-6 monthly intervals.</td>
<td>It must be noted that even if doctors are compliant, some situations do prevent them from adhering to the guidelines. Drug stock-outs in some health facilities (Ameh et al., 2017:262) is a major problem. This situation leads to patients and other role players expressing frustration with irregular supplies of anti-hypertension medicines (Ameh et al., 2017:262).</td>
</tr>
<tr>
<td>• Start hypertensive therapy immediately after diagnoses together with lifestyle modification.</td>
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<tr>
<td>• Initial anti-hypertension medicine dosage, low dose of thiazide diuretic, oral Hydrochlorothiazide, 12.5 mg daily.</td>
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<tr>
<td>• If BP is not achieved addition of an oral ACE-inhibitor, Enalapril, 10 mg daily or an oral long acting calcium channel blocker, Amlodipine 5mg daily.</td>
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<tr>
<td>• If BP is still not adequately achieved add a β blocker, oral Atenolol, 50 mg daily.</td>
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Finally, Table 2-4 identifies the non-compliance gap between the Standard Guidelines, Essential Medicines and the hypertensive patient in the South African context. These issues regarding the general measures that are put in place also show evidence of non-compliance due to the lack of an effective referral system, poor knowledge by patients and staff shortages.
Referring as noted in the Standard Treatment Guidelines and Essential Medicines List for South Africa (2015) regarding the management of hypertension: A reality check that identifies the non-compliance

<table>
<thead>
<tr>
<th>General measures</th>
<th>Examples of non-compliance (A reality check)</th>
</tr>
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</table>
| • When patients adhere to therapy and BP is refractory (>140/90mmHg).  
• If secondary hypertension is suspected.                  | Most patients seen in an out-patient department or hospital casualty have usually bypassed the referral system and most could have been managed at a PHC clinic (Mojaki et al., 2011:1). Mojaki et al. (2011) state that there is generally an ineffective referral system in hospitals and better patient care is needed within district health systems.  
Secondly, there are very few specialist hypertension clinics in South Africa, and the ones that do exist tend to be under-resourced (Moosa, et al., 2016:800), which have a negative impact on the referral system in general. |

In conclusion, whatever problem is noted, the general level of compliance is low and the impact on patients is great. One can sum this up by asking if the Standard Treatment Guidelines and Essential Medicines List for South Africa (Department of health, 2015) are effective controlling or at least influencing hypertensive patients' behaviours and choices?

2.5.3 The Integrated Chronic Disease Management Manual (2011)

The Integrated Chronic Disease Management (ICDM) manual (Department of health, 2011) is based on the building blocks set out in the WHO’s document, Innovative Care for Chronic Conditions: Building blocks for Action (WHO, 2002). This manual aims to assist facility operational managers in ensuring compliance and implementation of the six (6) priority areas, namely, improving staff values and attitudes, waiting times, cleanliness, patient safety and security, infection prevention and control and the availability of medicines and supplies (Department of health 2011:1). Those priority areas directly applicable to hypertension will now be discussed in Table 2-5 below.

Table 2-5: Integrated Chronic Disease Management Model (Department of health, 2011) and health system realities in South Africa

<table>
<thead>
<tr>
<th>Priority areas</th>
<th>Reported realities in South African health system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving staff values and attitudes</td>
<td>Breach of confidentiality by home-based carers (Ameh et al., 2017:262) is a reality as at times it is reported that nursing staff sometimes send patients themselves or a cleaner to fetch bulk medications for clinics (Ameh et al., 2017:263). This action obviously nullifies confidentiality and definitely shows a level of disrespect for the patient.</td>
</tr>
<tr>
<td>Priority areas</td>
<td>Reported realities in South African health system</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Furthermore, it has been noted that, at times, nurses communicate with patients in a harsh manner (Jardien-Baboo, 2016:403) causing patients to feel upset and afraid. All these scenarios negatively impact the patients’ confidence to communicate their needs. Even more serious, nurses are at times rude, upsetting the patients when they shout, creating an atmosphere of fear, which inhibits the patients from verbalising their worries (Jardien-Baboo, 2016:403) and makes clinic visits very unpleasant. Generally, nurses and patients alike described poor nursing practices and abuse of patients as common occurrences and only when nurses’ poor attitudes are addressed will it be possible to provide quality care to patients (Haskins et al., 2014:41).</td>
</tr>
<tr>
<td>Waiting times</td>
<td>Rigid appointment times and the inability to schedule emergency appointments are common complaints. Patients report that when they have a set appointment date they cannot go to the clinic even if they have another problem or emergency (Ameh et al., 2017:262). To further the problem, if they miss an appointment, it leads to “punishment” as they then have to wait in queues with subsequent visits (Ameh et al., 2017:262). Overall, long waiting times (Ameh et al., 2017:262) are evident at most out-patients or clinics.</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>All the areas of the ward premises need to be scrupulously clean. However, in some instances, aspects such as shortage of cleaners, cleaners’ negative attitude, lack of necessary skills and lack of effective cleaning materials were found to contribute to patient dissatisfaction (Shilubane et al., 2015:445). This does not only affect the patients negatively but also impacts the expected standards of hospital or clinic’s hygiene and sanitation.</td>
</tr>
<tr>
<td>Patient safety and security</td>
<td>Negative comments about the level of comfort and security in the waiting rooms as well as the cleanliness of the patient toilets featured prominently (Mahomed et al., 2015:429). This general situation is in direct contradiction of the Standard Treatment Guidelines South Africa (2015).</td>
</tr>
<tr>
<td>The availability of medicines and supplies</td>
<td>“When my treatment is not available; then they gave me the one that was available that day” this direct quote reflects the state of nurses that are unable to prepack medicines due to staff shortages (Ameh et al., 2017: 262).</td>
</tr>
<tr>
<td>Infection prevention and control</td>
<td>As hypertension is a non-communicable disease this section is not directly applicable. However, if one links this aspect to hypertension through co-morbid diseases then it would make sense that infection should and must be prevented and controlled.</td>
</tr>
</tbody>
</table>

From Table 2-5, we can see that even though limited resources were cited, problems are evident. Patient reports and renditions of many of the experiences they have had within the South African public health system are negative and completely unacceptable. With the vast number of public health users, immediate actions to remediate the system should be investigated. To illustrate the extent of the problem, Ntuli et al., (2015:1); Norm et al., (2014:551); the Southern African
Hypertension Society (2018) and World Hypertension League (2018) state that more than 6,2 million South Africans have a blood pressure higher than 140/90 mm Hg and 3,2 million of these individuals have blood pressure higher than 160/95 mm Hg.

These statistics are at an unacceptably high level, resulting in an estimated demise of 53 men and 78 women on a daily basis in South Africa. Black South Africans suffering from hypertension are at higher risk of developing further complications from hypertension such as cerebral bleeding, malignant hypertension, and/or kidney disease, leading to congestive heart failure (Ntuli et al., 2015:1; Norm et al., 2014:551; Waterhouse, et al., 2017:2; WHL, 2018). In South Africa, levels of blood pressure control are shockingly low (Ntuli et al., 2015:3) since only 21% of men and 36% of women with hypertension are taking drugs to reduce their blood pressure.

The Essential Drug List (EDL) or Essential Medicines List (EML) is the system used for the selection of essential medicines in the South African public health section (Department of health 2015). These stipulated medications, in conjunction with the ICDM manual (Department of health, 2011), facilitates the hypertensive patient’s optimal care and functioning and can be considered a necessary guideline. These guidelines are essential, and one can even go as far as to say critical. However, even with these facts at hand, the reality of adherence by patients, remains poor. A more defined focus is thus needed to highlight and promote the empowerment of patients to engage them in positive self-care and go as far as to “actively coerce” them to take responsibility for their own health and lifestyle choices.

One manner in which these drastic measures can be taken is by reflecting and considering the middle-range theory of self-care of chronic illness (Riegel, 2012) as self-care is considered essential in the management of CD. In considering this approach much more education is needed to enable patients with hypertension to acquire the underlying self-care processes (Riegel, 2012:8). South African patients will have to be empowered to be able to make “naturalistic decisions” (Riegel, 2012:8), which are automatic and impulsive decisions in response to contextual occurrences in their lives. More reflective contemplation will also have to be promoted in the culture of many of the patients as this is linked to knowledge acquisition (Riegel, 2012:9), which requires a consequent action after their personal evaluation. Furthermore, the factors that affect self-care (Riegel, 2012:14) will also need to be taught in order to empower the South African patient and reduce the challenges experienced.

Experience, which is a basic contributor to developing skills, is needed to enable patients to plan, set goals and make decisions (Riegel, 2012:14). Pertinently communicating these experiences to the patient and educating them as to the actual bodily sensations will go a long way to making hypertensive patients more aware of themselves and able to take action. Secondly, motivating
patients to achieve their physical, emotional and medical requirements by explaining the worth of these actions and creating routines and forming habits will also enhance the patient’s self-care behaviours. From the above factors, patient confidence will be formed if patients are continually educated, supported and praised for their efforts regarding their self-care.

Finally, self-care can be seen from both an internal and external viewpoint in that support from others and accesses to care (Riegel, 2012:16) are both external factors, which can be accomplished by internal factors such as knowledge through continual education, which appeals to the individual’s sense of self and building internal motivation, through community engagement and individual support.

2.5.4 Care, coping and resources that are needed to understand patients with hypertension in the South African public health system

In South Africa, hypertension, along with diabetes, the main chronic diseases that impact the growing burden of disease. With this burden of disease, time, effort and resources are becoming more overextended, resulting in fewer patients achieving an acceptable level of support with their chronic disease. Regarding hypertension, this is reflected in the number of patients’ who have controlled hypertension. In order to reach these levels, the South African Department of Health has adopted a patient-centred model of chronic care, which is aimed at empowering the patient to take an active role in self-managing their illness by enhancing their knowledge, motivation and skills (also known as the ICDM manual). Section six (6) of this manual deals with “assisted self-management” (ICDM, 2014:118-122). The focus of the “assisted” self-management is aimed at using the PHC ward-based outreach teams to support and empower patient and communities in taking responsibility for these diseases by making lifestyle choices regarding their own health and well-being (ICDM, 2014:119).
Figure 2-4:  Presentation of the self-management component in the ICDM

2.5.5  Recommendations on how patients can be empowered towards enhanced self-care: A South African context

The community health worker is a generalist health worker that works under the supervision of facility-based professional / registered nurses. These members support the PHC initiative in providing health education, promoting healthy behaviours, assessing community health needs, managing minor health problems, and supporting links to health services and health facilities (Austin-Evelyn et al., 2017:2). The self-management component should promote informed, motivated and adherent patients; however, in order to achieve these outcomes to be realised (Department of Health, Chronic Disease Management Manual, 2014:119), the following will have to be performed by the community health worker.

- Primary identification of high-risk patients at family level.
- Support the stable chronic patients by monitoring and assisting them at the patient’s home and delivering medication via courier.
- Providing continuous health promotion and education.
- Establishing age-appropriate support groups to strengthen the patient’s control.

2.6  Concluding statements

As Kear (2015:185) states, it is no longer acceptable to provide healthcare information to patients and expect that they will adhere to the treatment plan. Patients must be encouraged and empowered to engage in healthcare decision-making and treatment regimes. This collaborative approach will yield the best results for the patient, the family and health care agency. Therefore, if we, as members of the helping profession, can explore and understand the hypertensive patients’ perceptions about their care, how they cope and the resources available, only then can we support them with the necessary self-care endeavours that will enhance the individual’s self-
confidence. This could then result in these patients taking over their own self-care along with the required responsibilities.

Consequently, with this in mind, the researcher has thought it best if patients can be coached from an early diagnosed status right through to patients who have been living with their disease for some time, to begin to “listen” to their own bodies, trust their intuitions and start to act on their inner knowledge in order to look after themselves, nurture their bodies and start to live a more directed self-chosen life.
BIBLIOGRAPHY


### SECTION 3: MANUSCRIPT

#### 3.1 Manuscript writing declaration

The contributions of each researcher are outlined in the table below:

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Lynn Preston</td>
<td>Planning of the article, selection of the journal, conducted data collection and analysis, constructed themes, wrote the background and problem statement, methodology, results and discussion.</td>
</tr>
<tr>
<td>Prof Petra Bester</td>
<td>Assisted in finalising the journal that was selected, co-coded and analysed the data, organised themes in the results, supervised the research.</td>
</tr>
<tr>
<td>Prof IM Kruger</td>
<td>Co-supervised the research and reviewed the manuscript</td>
</tr>
<tr>
<td>Prof R Pretorius</td>
<td>Co-supervised the research and reviewed the manuscript</td>
</tr>
<tr>
<td>Prof B Riegel</td>
<td>Provided expert advice and direction in the application of self-care in the context of this manuscript.</td>
</tr>
</tbody>
</table>

The declaration by the author and co-authors of the manuscript to confirm their roles in producing the article.
DECLARATION:

We hereby declare that we have written the manuscript and that our contribution to this manuscript is indeed as stated above.

Dr Lynn Preston  
Author

Prof Petra Bester  
Co-author

Prof Lanthé Kruger  
Co-author

Prof Ronel Pretorius  
Co-author

Prof Barbra Rigel  
Co-author
3.2 Author guidelines

International Quarterly of Community Health Education

All manuscripts should be submitted online at the International Quarterly of Community Health Education submission portal at http://mc.manuscriptcentral.com/qch. The site contains detailed instructions on how to submit and track the progression of a manuscript through the review process. All manuscripts will be assigned a manuscript number, and authors will receive email confirmation acknowledging receipt of submission. Authors should not transmit hard copies of their manuscripts to the journal office.

Manuscripts must be double-spaced and have wide margins. Paginate consecutively starting with the title page. The organisation of the paper should be indicated by appropriate headings and subheadings.

Originality Authors should note that only original articles are accepted for publication. Submission of a manuscript represents certification on the part of the author(s) that neither the article submitted, nor a version of it has been published, or is being considered for publication elsewhere.

Abstracts of 100 to 150 words are required to introduce each article.

References should relate only to material cited within text and be listed in numerical order according to their appearance within text. State author’s name, title of referenced work, editor’s name, title of book or periodical, volume, issue, pages cited, year of publication, and DOI (digital object identifier).

Do not abbreviate titles. Please do not use ibid., op. cit., loc. cit., etc. In case of multiple citations, simply repeat the original numeral. Detailed specifications available from the editor upon request.

Footnotes are placed at the bottom of page where referenced. They should be numbered with superior Arabic numbers without parentheses or brackets. Footnotes should be brief with an average length of three lines.

Figures should be referenced in text and appear in numerical sequence starting with Figure 1. Line art must be original drawings in black ink proportionate to our page size, and suitable for photographing. Indicate top and bottom of figure where confusion may exist. Labelling should be 8 point type. Clearly identify all figures. Figures should be drawn on separate pages and their placement within the text indicated by inserting: (Insert Figure 1 here).

Tables must be cited in text in numerical sequence starting with Table 1. Each table must have a descriptive title. Any footnotes to tables are indicated by superior lower case letters. Tables should be typed on separate pages and their approximate placement indicated within text by inserting: (Insert Table 1 here).
Title page

Utilising psycho-education as a health promotion strategy to empower patients with chronic hypertension in a South African public health system towards enhanced self-care

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ABSTRACT

Within an overburdened health system in South Africa, psycho-education is proposed as a low cost health promotion strategy whereby patients can be empowered to take more responsibility for their own health and their lifestyle choices. By understanding the views of patients with hypertension regarding their coping, caring and use of the resources available to them, directed psycho-educational strategies home in on the patient’s own internal resources towards coping and self-care. The study was conducted at the medical out-patient clinic (MOPD) at a district hospital, North West province, South Africa. From a qualitative, interpretive descriptive design through purposive sampling, twenty-four (24) adult patients with chronic hypertension participated in semi-structured, individual and digitally recorded interviews. The study was overseen by the Health Research Ethics Committee, permission granted by the provincial Department of Health and optimal credibility assured. Interviews were transcribed and thematically analysed on a first and second level. Six (6) main themes emanated, highlighting the organisational, patient-specific and hypertension-specific realities of the patients and the situation. This enabled understanding, in order to recommend psycho-education interventions to enhance self-care. The conclusions of this study reflected that psycho-education, as a low cost health promotion strategy, can empower patients to take more responsibility for their own health and make better lifestyle choices.

Keywords

Psycho-education, health promotion, self-care, hypertension, public health system, South Africa
Introduction

Presently the South African health system is under-resourced and restricted, resulting in services which extend from limited to non-existent. In order to assist the public health system, it is thought that empowerment of patients towards self-care would be an ideal solution to a system that really does not have the manpower to adequately support chronic patients.

This year, World Health Day, 7th April 2018, was dedicated to one of the World Health Organization’s (WHO) founding principles, namely: “The enjoyment of the highest attainable standard of health” (WHO, 2018). This fundamental right is foreseen for every human being irrespective of race, religion, political belief, economic or social condition. Unfortunately, this right has not yet been achieved.

In South Africa the public health system is governed by many good and established policies and guidelines, such as the integrated chronic disease management (ICDM) model (Department of health, 2014). This model is based on the building blocks set out in the WHO’s document, *Innovative Care for Chronic Conditions: Building blocks for Action* (WHO, 2002), which aims to assist facility operational managers in ensuring compliance and implementation of the six (6) priority areas (improving staff values and attitudes, reducing waiting times, improving cleanliness, patient safety and security, infection prevention and control and facilitating the availability of medicines and supplies). Another example of guidelines are the Standard Treatment Guidelines and Essential Medicines List for South Africa (Department of health, 2015), which is a basic medical guide that informs medical practitioners regarding the treatment and essential medicines that should be used in the treatment of diseases.

However, even with these policies and guidelines in place, the South African public health system is still in dire need of self-care interventions for patients with chronic diseases. The paradox presented is that an overburdened health system cannot provide the necessary resources to empower patients with chronic diseases towards enhanced self-care. Thus, a psycho-educational health promotion strategy, as a new dimension towards self-care, within the realities of the South African public health system, is proposed. Psycho-educational interventions are not seen as treatment in itself, but, in clinical settings at least, it is viewed as the first step of the overall treatment plan (Agren *et al.*, 2015:11). Psycho-educational
interventions encompass a broad range of activities which combine educational aspects, counselling, supportive group or individual interventions (Australian Institute for Professional Counsellors AIPC, 2014). These interventions are provided to patients and are tailored or standardised to the unique needs of the situation or patient (Barlow & Ellard, 2004:639; Capurso & Ragni, 2016:173). Furthermore, psycho-educational interventions are effective in dealing with patients and their families, teaching patients and families about the nature of their illness, its treatment, coping and management strategies and skills needed to avoid relapses (AIPC, 2014; Capurso & Ragni, 2016:173). Self-care is a misleadingly simplistic, yet progressively, multidimensional concept. Orem defined self-care as the performance or rehearsal of activities and behaviours that individuals engage in (McLaughlin Renpenning & Taylor, 2003; Orem et al. 2001). Riegel et al. (2012:5) presents self-care within the three key processes, self-care maintenance, self-care monitoring and self-care management. Self-care is seen as an underlying essential factor in the management of any chronic disease (Jaarsma et al., 2017a:72). Yet, difficulty is often experienced when patients struggle to follow this advice and effectively initiate and perform on their own, in maintaining, monitoring, and managing their health and well-being. Nevertheless, patients who are able to successfully embrace self-care in their daily routines reported a better quality of life compared to those who reported poor self-care (Jaarsma et al., 2017a:71).

In the South African health system, re-engineering of Primary Health Care (PHC) is aimed at increasing access to health services and improving the quality of these services (Le Roux & Couper, 2015:440). In order to achieve this aim, public and community participation is essential, which means that individual families within a community must be involved as the first level of health contact and health services. Furthermore, services must be brought as close as possible to where people live and work (Paulus, 2013). With the concept of bringing health to the people, theoretically, self-care and healthcare are concepts that should be activated through ward-based outreach care to patients suffering from chronic diseases. However, within the South African context no significant research has been done with patients with chronic hypertension, regarding self-care within the public health system, even though the public health system serves more than 80% of a population of 52 million people who are state dependent for free medical care (Jobson, 2015). In a study conducted by Gomez-Olive et al. (2017), on the prevalence and awareness of
hypertension across 6 sites in Sub-Saharan Africa, the authors found that South Africa has the highest prevalence of hypertension in southern Africa. Considering the impact of hypertension on cardiovascular disease it was only natural for this study to focus on hypertension within the realm of chronic diseases in South Africa (Gomez-Olive, 2017:85).

The value of self-care in chronic diseases has a crucial impact on decreasing the need for health care resources in overburdened healthcare systems in most countries (Strömberg *et al.*, 2012: 133). South Africa is no different. Even though health care workers (HCWs) encourage patients to take control and be responsible for their own health at grass roots level in their own homes (Paulus, 2013) in conjunction with the home-based outreach care, this is not observed. The South African Health Review 2016 (Grey & Vawda 2016), states that for South Africans to step up to the plate and take responsibility and control of their health, environmental factors, policy initiatives and co-ordinated specific plans to make healthy foods more accessible and available are desperately needed (Gray & Vawda, 2016:11). This support must be seen as new self-care interventions, which are presented in a context where poverty, unemployment, low literacy and the demographic and nutritional transition implies an ever greater increase in chronic diseases and an even greater challenge in getting the self-care message out to people. With this in mind, psycho-education is seen as a possible answer to both these problems.

3.3 BACKGROUND

**Government initiatives towards universal coverage in South African public health: an overburdened and under-resourced system**

The focus on universal health coverage is currently high on the agenda of the South Africa Department of Health. Universal coverage and quality care have become the primary aims of the National Health Insurance (NHI) system, which should show significant strides in moving towards this ideal by 2030 (South Africa. 2015. National Health Act, 2003. White Paper on National Health Insurance. Government Gazette, 39506, 11 Dec). The NHI was phased in from 1 April 2012, with ten districts in the country identified as pilot sites. These NHI pilot sites focused on key elements, including district health services, service delivery, strengthening of health systems and health financing. The Dr Kenneth Kaunda (DKK) district (North West
province) was one of the pilot sites. DKK consists of four local municipalities, namely Matlosana, JB Marks, Maquassi Hills and Ventersdorp. Many of the patients in DKK utilise the MOPD clinic as their contact point for hypertension management.

**Making integrated chronic disease management more patient-centred**

The South African public health system follows the ICDM model. This model refers to ‘assisted’ self-management, which in fact is globally referred to as self-care. The aim of self-management mentioned in the ICDM, is to empower patients with chronic disease to take responsibility and manage their own health through understanding preventative and health promotional actions (Department of health, 2011:119). This is done through the community health worker (CHW) network. However, there are many challenges experienced by these workers. Nxumalo et al. (2016:71) states that limited multi-sectoral co-ordination leaves the CHW’s with little capacity to work and support people in poor communities with “upstream” (more complicated health issues) factors of health and well-being. Generally, even though CHWs are performing well, the lack of support and training impacts negatively on their services (Nxumalo et al., 2016:71; Thompson, 2016). Using psycho-education to take enhanced self-care to the people as a health promotion strategy is considered a noteworthy proposition. This strategy is seen as a complimentary approach for patients in the PHC clinics in educating and supporting their health choices and lifestyle changes.

**Self-care through psycho-education proposed as value proposition in chronic disease management**

Since Orem’s initial self-care theory developed (Orem et al., 2001), the concept self-care has increasingly been incorporated into research. Self-care is acknowledged as essential in managing chronic diseases and is used by patients in obtaining the ultimate goal of improving outcomes (Jaarsma et al., 2017b:364). According to Riegel et al. (2012:5-8) a patient engaging in self-care becomes an active partner in the process of managing their illness. Furthermore, self-care activities are uniquely individual for each and every patient. The three main processes of self-care that encourage maintain and promote health are *maintenance* (behaviours that maintain physical and emotional stability), *monitoring* (when individuals are acutely aware of their body and “listen” and react to the changes that they are aware of) and *management*
(actions and behaviours that are responses to signs and symptoms of the illness). Decision-making is another processes that underlies the individual’s self-care actions when they weigh up evidence before choosing a course of action. However, this rarely occurs, as more automatic, contextual and almost impulsive decisions are usually taken in real world situations, reflecting a more naturalistic decision-making approach (Riegel et al., 2012:8-9). Secondly, reflection is also noteworthy, as it is linked to knowledge acquisition (Riegel et al., 2012:9), highlighting the fact that the more one knows and understands the more one considers the outcomes and alternatives.

Thus, psycho-education as a therapeutic intervention can provide knowledge, understanding and insight in a situation, resulting in patients and their families acquiring a better understanding of the condition and the circumstances (restrictions and resources) that are apparent in the environment (Agren et al., 2015:11; Barlow & Ellard, 2004:639; Capurso & Ragni, 2016: 173). Patients perceive themselves as being heard, resulting in them feeling comforted, understood and supported (Javadpour, et al., 2013, 208; Schnitzler et al., 2017, 119-120), which creates an enabling environment where patients can respond to their illness, by complying with medication, better communication with their health professionals, improving individual and family well-being, lowering relapse and improving recovery (Rami, et al.,2018:616; Lina et al., 2016:566).

The overall research question that expounded from the problem statement was “How can psycho-education, as a health promotion strategy, empower patients with hypertension towards enhanced self-care within a public health system?” Thereafter these subsequent research questions followed:

**Research Question 1:** How do patients with hypertension experience the care within a public health system?

**Research Question 2:** How do patients with hypertension care for themselves within a public health system?

**Research Question 3:** How do patients with hypertension cope with this chronic disease within a public health system?
Research Question 4: What is patients’ with hypertension awareness of the available resources?

Research Question 5: What resources do they utilise and/or need to enhance their self-care within a public health system?

3.4 Research Objectives

The stipulated objectives were to explore, interpret and describe patients’ with hypertension experiences of the care received within the public system and their self-care; how do they cope with hypertension within this public health system; what are these patients’ awareness of available resources and what resources do they utilise/need to enhance their self-care.

Context of the research

In the South African health system, the smallest type of hospital that provides general medical services is the district hospital (South Africa. 2015. National Health Act, 2003. White Paper on National Health Insurance. Government Gazette, 39506, 11 Dec). The participating hospital that was used in this study was a district hospital in the North West province of South Africa. This hospital provides general medical services and is also actively involved in many aspects of PHC. The MOPD is a department that supports patients that suffer from chronic diseases, among others, hypertension. This hypertension clinic was used as the site to access hypertension patients and afforded the opportunity to apply a middle range theory of self-care with hypertensive patients in the South African health care system. The MOPD at this hospital is a busy, fully operational department, with medical practitioners, other health professionals and administrators supporting patients reporting for medical interventions. Refer to table 1 for a summary of the patients, staff and services rendered.

[Preferred position for Table 1]

3.5 METHODOLOGY

The research favoured a qualitative method (Creswell, 2014:19-21) with an interpretive descriptive approach (Thorne, 2016:13). Interpretive descriptive design (Thorne, 2016:39-41) aligned itself to a constructivist and naturalistic orientation to inquiry, with acknowledgement of clinical expertise viewed as
a useful starting point. The aim of interpretive description is to generate knowledge for the clinical context of the applied health discipline, which can increase patient awareness of the phenomena (care, coping and use of available resources) and also to apply this knowledge to practice as a health promotion strategy, which would empower patients towards enhanced self-care practices.

Sample

Patients with chronic hypertension were sampled from the MOPD at the selected district hospital in the North West province through purposive sampling. The target population was patients with chronic hypertension utilising the services of the MOPD clinic at the selected district hospital, North West province, South Africa. The inclusion criteria were adult patients, eighteen (18) years and older, diagnosed by a medical practitioner with and treated for chronic hypertension for at least six (6) months. They were also to be residing in and around the DKK district and using the local MOPD as their contact point for the hypertension management; able to express themselves fluently in English or Afrikaans as these languages are the official modes of instruction with the hospital; willing to participate voluntary in semi-structured, individual digitally audio-recorded interviews when visiting the MOPD and willing to sign informed consent. Participants were recruited by an advertisement posted in the MOPD. The sample size was determined by data saturation (De Vos et al., 2013:75; O’Reilly & Parker, 2012:192), which occurred after 24 (n) interviews. Participants with other co-morbid conditions were not excluded.

Data collection

Prior to data collection, ethical approval was acquired by the Health Research Ethics Committee (HREC) of the North-West University and participants signed informed consent in the presence of an independent person. Data collection was realised with individual, semi-structured interviews and completion of a demographic information sheet. Interviews were not an ordinary set of questions and documented responses, but as a frame of reference sensibly constructed, presented with an attitude to understand and facilitating communication style (Thorne, 2016:135). The interview schedule was reviewed by the research team and independent experts, and the following questions guided the discourse:
• How do you experience the care that you get from the hospital for your hypertension (high blood pressure)?

• How do you care for yourself with this hypertension (high blood pressure)?

• How do you get through with this illness (high blood pressure) or what do you do in your life to get through this illness?

• What resources here at the hospitals do you know are available to help you with your hypertension (high blood pressure)?

• What resources from the hospital do you use to help you with your hypertension (high blood pressure)?

• What resources do you need to help you with your hypertension (high blood pressure)?

The interviewer was an experienced educational psychologist who adhered to Thorne’s (2016) recommendation to be a neutral and non-judgemental facilitator. Interviews were done in an empty office at the hospital while patients had to wait for care at the MOPD. The office was private and comfortable.

All interviews were digitally recorded and transcribed by an independent person. The person who transcribed the digitally recorded interviews signed a confidentiality agreement. All participants were given pseudonyms to enhance anonymity. Field notes were also used during interviews.

Data analysis

Thematic analysis was done using the methods of Braun and Clarke (2006:4) where after the researchers tried to find the logic of the relationships between the themes to form a comprehensible whole (Thorne, 2016). The six (6) phases of thematic analysis were familiarisation with the data; coding; searching for themes; reviewing of themes; defining and naming of themes and then writing up the story. Data collection, analysis and interpretation were closely integrated as the researcher moved beyond basic investigation towards the dimension of interpretation. A consensus discussion was held with a co-coder.
3.6 Credibility

Thorne’s (2016) credibility criteria were adhered to and epistemological integrity was enhanced through the interconnectedness between the research questions and the planned methodology. The golden thread was consistently present throughout the realisation of the data collection, analysis and interpretation and the reporting thereof. Analytical logic was strengthened by a rich description of the methodology followed and the results that serve as an audit trail to present the chain of reason in the decisions made. Representative credibility was obtained by having 24 interviews with participants to ensure that data was not limited to certain experiences and perceptions. The researcher was familiar with the hospital and MOPD and had prolonged engagement in the MOPD and with the participants. Interpretive authority was enhanced by a research team of experienced professionals and experts in their different disciplines. Intercoder reliability was ensured during three consensus discussions.

3.7 Ethical considerations

With the ethical clearance from the University in hand, the researchers obtained permission from the North West Provincial Department of Health and from the Patient Safety Committee of the participating hospital. Participants were respected by ensuring anonymity and confidentiality as participants’ names were replaced with an identifying code on the demographic survey and during transcribing. None of the participants’ details were revealed, thus identification of participants was not possible during data analysis or when reporting of the results were done. The data was accessible by the researcher and transcriber only. Digitally audio-recorded interviews were copied to a password protected computer and then deleted from the recorder. All data were kept on a password protected computer and in a lockable cupboard in the researcher’s office on the premises of the University. The recruitment and engagement process enhanced justice as participants were treated fairly. Participants had sufficient time to decide about their participation and could withdraw at any time without discrimination. The participants could also contact the researcher or the HREC office should they required more information or wanted to lodge a complaint. Interviews were done whilst participants had to queue at the MOPD and they did not forfeit their place in the line. The interviewer was experienced, and the venue was private and conducive. The interview questions were not
personal or emotional and participants were informed that they could access onsite counselling if needed. Although there were no direct benefits to the participants, the overall benefits outweighed the risks.

3.8 RESULTS

The results reflect the experiences of the participants regarding their care, coping and available resources. The participants were purposively sampled at the medical outpatients department at Potchefstroom Hospital. The data was obtained through in-depth, individual interviews of patients who were willing to share their experiences. The interviews were emotionally intense providing rich content and data saturation was obtained after 24 interviews were conducted. The demographics of the population are outlined in Table 3.

Biographical profile of the participants

From the biographical information gathered, the number of male and female participants reflected an even gender balance between patients, with the age of male- and female patients ranging between 37 to 77 years and 43 to 74 years, respectively. All the participants resided in the Potchefstroom area. Besides the participants’ diagnosis as having chronic hypertension, other co-morbid diseases included: Diabetes mellitus; Arthritis; Heart disease; Cholesterol, Parkinsons; Depression; Asthma; Osteoporosis; Epilepsy and diseases related to the thyroid. The educational level of the participants’ ranged from no schooling to Grade 12 and three (3) of the participants had diplomas. Most of the participants were pensioners and housewives, with four (4) patients being professional or semi-professional (a nurse, a library assistant, an editor and a secretary). Some of the patients who were not pensioners or housewives were self-employed.

Six (6) themes emanated from the interviews (refer to Table 2). These themes are not presented in a specific sequence, but randomly reflect the responses of the participants as they related their views and ideas. Direct verbatim quotes are presented to enrich the discussion of the results. The main themes that were evident ranged from positive and negative organisational factors; specific patient needs, which included health education needs; coping styles; perceptions of the patients regarding acceptance of the disease, clinic routines and adherence to medication and support that was lacking for the frail and elderly, family assistance and individual follow up routines.
Positive and negative organisational factors reported

Participants shared positive and negative organisational factors, underpinning their perceptions, needs and views of the health system and in particular aspects related to the MOPD at the hospital.

Positive organisational factors present within the MOPD

The positive organisational factors were evident in the friendly approachable hospital staff as participants indicated that “… the people must not be shy they must never be shy to come to this clinic.” Reflecting a personal choice from the patients to attend this very clinic, which can be ascribed to the “people centredness” of the clinic and the confidence which the patients had in the staff. Overall participants voiced a general satisfaction regarding the treatment that was received, as patients with hypertension viewed the MOPD and showed an unusually high level of understanding and acceptance for the situation surrounding the MOPD, a response not really reflected in the literature. In this study, even though participants acknowledged problems and negative organisational issues, these adversities seem to be minimal in relation to what the patient received.

Participants had an appreciation for the positive organisational factors

Typical responses from the patients reflect a realisation that their vital life sustaining medication can be obtained at the hospital (pharmacy department) and that in order to obtain the medication they have to go through the MOPD. Patients openly acknowledge that this service is free-of-charge. Acknowledged from a family member referring to their elderly grandmother. “…she gets all her pills here, sometimes she gets three month’s supply.

Participants do present as extremely grateful, as one participant expressed, “…the sister does lots for us, I do not know what I would do without this clinic”; “…at this clinic the people are always smiling, they do not scold you, they only help”. Participants’ responses clearly reflected that out of many of the district clinics that they could attend, the MOPD was the favourite one of choice, “… the service that you get here...
is good – they look after you very well and they speak so nicely to you and if you have a problem, they help you very quickly”. The participant’s attitude towards the clinic is one of truly being grateful and personally appreciative of the services and support. These responses reflect the patient’s deeper, more intense personal level of involvement with the staff, the services and support the clinic provides. However, further responses also revealed how participants at the MOPD focused on the satisfaction factor of receiving essential medication free-of-charge and the care they received, they made excuses and downplayed the negative or dissatisfaction that they experienced in obtaining the medication. Generally, participants presented as grateful and understanding with a notable camaraderie that underlies this group of people. Overall, in the MOPD, all these small factors contributed to a general feeling of extreme gratefulness even under the most trying circumstances.

The negative organisational factors that were evident within the MOPD

Two (2) of the most prominent negative themes were the inefficient filing systems and long waiting times, which was also generally noted in the literature. Participants at the MOPD are fully aware of the importance of their file as “… one of the things here is that without a file you can do nothing, not see the doctor or get you medication”. The filing system seems to present the biggest challenge, as without a participant’s file, no individual can proceed in the system, therefore the inefficient filing system creates great problems for the time restricted participant, who has either taken off work to attend the clinic or has got up early in the morning, had to pay for a taxi to be on time for their appointments. One solution was given by a participant “… I just take leave the whole day and then I just sit here and wait”. The second negative organisational factor is the long waiting times. This problem is also directly impacted by the participant not having their file readily available, resulting in the sister in charge having to go and hunt for the file in the records section. As one participant commented, “…when it was my turn to see the doctor, they could not find my file and files are a big problem- the waiting makes people frustrated”.

Staff shortages throughout the value chain, which is so noteworthy that even the participants pick up on this, “…to be honest one of the things that I notice at the clinic is that the hospital is under staffed”. By just listening to the participant’s relate their narratives regarding long waiting hours, one can also reason that
the MOPD is under staffed, as one participant commented, “… there are just too many participants and not enough doctors”. Furthermore, from the researcher’s own observations the two sisters that were working at the reception desk were also overwhelmed and did their best to keep order and the flow of participants going.

Another aspect that can be associated with the staff problems is that there is a disruption between the different doctors that see the participants and the different clinics that some participants attend. “… I was disappointed firstly they sent me to Baragwaneth Hospital and then they sent me back here, no one knew that I had moved and where I was living and no one took the trouble to see what file I had”, said one participant. Another comment that highlighted this issue was a participant that said, “… no one really checks on the file or look to see what medication you are taking”. In considering these comments, one can see that participants receive different care and input from different doctors, which will impact on their medication and care.

Transport also creates a notable challenge for the patient, to get to the MOPD clinic in time for their appointment, participants must take a taxi, which usually leaves very early in the morning and then passengers are subjected to long waits as taxi’s do not leave their stops until the taxi is full. Apart from the irregular timetable that taxi’s follow, they are also expensive, as one family member commented, “… I work so I cannot bring my mother, she has to take a taxi. It is very expensive as they must bring her and take her back home”. Furthermore, if the pharmacy does not have the medication then the participant must travel to the hospital for a second time to obtain the outstanding medication. “The pharmacy has another rule, you must fetch medication by 9 o’clock – some people have to walk or hike back to the hospital to get their medication, especially if they do not have money”. Generally, transport is very challenging for the average participant, even more so for the physically disabled, elderly and frail.

Another negative organisational factor raised was the physical environment of the clinic, which was not conducive to optimal participant care and support. The general physical atmosphere in the MOPD was an unfriendly, overcrowded atmosphere with uncomfortable seating, no ventilation and very limited natural light. Participants describe the environment as being “very full with no place for a mouse”. Regarding
ventilation, participants complained that it was very stuffy in the clinic and that they get so hot and sweaty and they need “…a little more ventilation so that even a little breeze or wind can circulate”.

Participants voiced their experiences of language barriers, “…I am not scared here at the clinic but the English; I do not know English”. This barrier is at times very stressful for participants and they do not feel fully comfortable in expressing themselves regarding personal issues of their disease in English, which is not their mother language. Participants express the need to be understood and say “…somewhere there must be a translator to help us”. Another communication factor that must be noted is that the native language spoken in the area (Tswana) does not have adequate medical vocabulary to enable the participant to describe or relate his affliction, this results in serious communication problems.

**Identified patient-specific needs**

*The majority of patients were satisfied*

Majority of participants are satisfied, however there are some noteworthy occurrences that reflect participant specific needs. Participants focus more on being satisfied, grateful and accepting and down-play dissatisfaction as they continually compare the MOPD to other clinics which they attended. Participants related feelings of being grateful for receiving medical attention, so much so that they do not feel it is their right to complain, therefore the specific needs were not overtly evident. One participant reflected on her experiences and said “…people complain about this hospital, but all I can say is that the place is very neat, the sister really goes to great lengths to make the clinic nice”. The participants were noticeably “overly” thankful for what they got. They explained that the care they received at the MOPD was better than at other health institutions and this made them thankful when they reflected on the other negative experiences. As one participant noted, “…they make me feel important here - because if I come here, they take me as a person - I feel special here”. Participants were grateful that their basic needs were identified, being acknowledged as individuals and recognised their trials and tribulations, that they chose the MOPD above many other clinics in the district.
However negative patient-specific needs were also identified. Transport and lack of food were two of the most overt specific needs that were identified, “…. If we leave at 4 o’clock in the morning to be here at 6 o’clock, we don’t get time to eat”. This very valid point was raised as many participants leave early in the morning, travel long distances in cramped taxis, then have to stay at the clinic for the entire day, as related by one participant, “….I sat the whole day without eating anything’. The problem of having to be early at the clinic and not having something to eat is compounded when one considers the frail, elderly and the diabetic participants. However, once again it is notable to see and experience the camaraderie that underlies this group of people as each individual shows care, compassion and total understanding for the unwritten rules of the MOPD as consideration is given to all the older and frail participants. The courtesy that is shown to every elder and frail patient - is really astounding.

There was also a tendency that participants often focused entirely on the pharmaceutical products (medication), tending to not adequately engage with the medical professionals in order to obtain a level of understanding of how the medication works or what the medication does, “….at the hospital I do not need anything because I get my medication here”. It became evident that the participants' viewed their care (and their responsibility) in so far as religiously taking the medication the doctor prescribes, not defaulting and attending their appointments regularly. This is their recipe for coping and they continue without the need to obtain a better understanding of hypertension.

Participants readily accept the long waiting hours that they must endure in order to obtain medication. “Waiting is a big problem we came at half past seven this morning and we still have not seen a doctor the clinic is good, but we stay long”. One of the participants came up with a suggestion that “… more streamlining is needed in the clinic, I am sure people would not wait so long then”. Others commented on the long waiting times saying that “… from sitting such a long time my feet swell”. However, generally they end their complaints by saying “… but what can we do we need the medication”, adding a comforting after though, “… I can’t complain everyone here is friendly and helpful”.
Specific patterns in health education themes

Health education emphasis placed on medical management

Health education for these participants has been repeatedly entrenched in them as conscientiously taking their medication, same time every day and decreasing their salt intake. Throughout the interviews it was clear that health education in the MOPD for participants with hypertension places emphasis on medical management with medication compliance and adherence being uppermost on the agenda followed by lowered salt intake and then, coming in at a very poor third place, lifestyle changes. The continual participant’s feedback amounts to statements like, “…I must drink my medication and eat vegetables”; “… I must not eat salt”; “… I must drink my pills in the morning”; “…I do everything the doctor tells me to do”; “… I look after myself”; “… I live well even though I have high blood pressure, if I just take my pills I will be OK”.

Participants in general are unaware of healthy lifestyles, changes in lifestyle and self-care activities. Most of the responses reflect participants who rely heavily on the medical aspect and see their health being in the hands of others who know better and give them the medication. There is no real evidence of self-care or the participant taking responsibility of making good lifestyle choices. “…we need something to take home, something that tells us about the medicine, so that we can understand”, even with this need to gain information there was still no idea about healthy lifestyle choices. Participants acknowledging that they were generally unaware of what exactly a healthy lifestyle is or how to make good decisions, “… they must teach us more about high blood pressure and how we must eat, sleep and exercise, we must know these things”. Furthermore, many presented with low motivation to change their behaviour, this was also partially due to their economic circumstances where they were just not in a financial position to buy better foods.

Participants were aware of the Student, Registered Counsellors from the University but seemed not to interact with this source of information freely. These students are honours degree students in Education Psychology, placed in practice under the supervision of a registered Education Phycologist. Overall, even though the participants were aware of the support that was given by the University students, they were rather passive “… yes they do speak to us”. This resource, even though minimal, was one of the resources
that was mentioned regarding educational support, “… if these students can talk about how we must handle our sickness – give us a bit of encouragement – just tell us they are here for us”. It is therefore significant to note that the university students created an alternative educational source besides the medical information that was “drummed” into the participants.

This source of information was clearly inadequate, as participants requested more information “… if the students could just talk to us about how to handle our sickness and give us some encouragement”. Furthermore, participants commented on the student’s posters saying, “…the posters help me, I like reading. I do not know what those people do who cannot read. But I see they (the students) speak to them alone”.

**Perceptions regarding coping with hypertension**

*Neutral acceptance of having a chronic disease*

Most participants presented with a neutral acceptance of having a chronic disease, “… what can one do, if you got it? Nothing you just live with it”. Their passive acceptance of what they feel as the inevitable, can almost be interpreted as denial and accepting the expected, unavoidable life of an older person. “You know it is difficult, I just want to die, I am tired, and my body is tired - I am 58”.

Participants in general accept having hypertension. In coping with hypertension, participants explained that education usually is seen as a mechanism to encourage participants to drink their medication, eat less salt and make lifestyle changes, “…. You must accept it, it does not help to go and sit in a bundle in a corner and cry. I know I must look after myself and drink my medication.” This again reflects the superficiality of the participant’s coping skills, highlighting the medical aspects in managing chronic hypertension without really understanding the disease, “…I suppose you must look after yourself, look at you eating habits and everything that goes with that?”

Active denial of hypertension not detected, rather a passive fatalistic acceptance that reflects these participant’s ignorance of their part that they themselves could play in living an optimal life. One of the last interviews put this in a nutshell, “…what they give me (medication) and what they tell me to do is all I do – it works for me – I do not have any special needs – I just look after myself”. Many of the participants are
so dependent on the medication that they follow the medical advice and clinic routines and so not for one moment consider that they themselves have an active role to play in the situation.

Getting and drinking medication tends to be seen as the critical factor in managing chronic hypertension

As mentioned in the previous theme, participants do not see themselves as part of the management of their chronic hypertension. For the majority of the participants who attend the MOPD, faithfully drinking their medication is the dominant coping strategy with which they present, “… the doctors are treating us well, you get your file and go there, then you go and get your medication, it is free. I don’t struggle anymore, I am recovering. Before I was very ill and had to come every month. But now the doctor gives me three months medication and today I will get six months pills. I have to take the pills every day at the same time and not eat salt. I am OK now with the treatment they (doctors) are giving me”.

For the participant, medication adherence implies that one must drink their medication every day, same time after they have eaten. This simplistic formula has been “drummed” into the participants and is almost a ritualistic mantra that participants recite when they are asked about self-care or taking responsibility for their condition, “…you see, now I come to the doctor, I then go to the chemist and get my free medication-then I take it like the doctor tells me because they are all right – the doctor and the sister”. On asking this particular participant about her diet she answered “… I eat everything that is good, normally like everyone else”. Further advice from a participant illustrates this point perfectly, “…it is nothing, we must just drink our pills, we must take our pills – stick to our pills and then we will feel better”. Generally, participants at the MOPD rely heavily on their medication as they do not see themselves as part of the solution to their chronic hypertension problems.

Becoming followers of the clinic’s routine

Getting medication is important enough to accept long waiting cues and medicine shortages, cramped environments, incompetent filing systems and many other challenges. It is with this in mind that one can understand the participants’ attitudes and compliance within the MOPD, as when one does not have any other access to basic vital healthcare, patience and acceptance is not much to of a price to pay for basic
medical necessities, “…at least I am in a system”. The MOPD are very routine bound with participants arriving very early in the morning in order to finish early. MOPD clinic hours begin around 8 o’clock when the doctors arrive and end when the participants are all seen. Routines and time limits tend to be in place throughout the hospital environment. At the pharmacy repeat scripts or stock out medications which must be collected, are only attended to before 9 o’clock in the morning where after the day begins with the routine dispensing of the day’s medication. Participants are scared to lose their place in the queue and remain with the routine. If you do not hear your name called by the doctor then they put the file at the bottom of the pile, therefore “…do not ask too many questions and listen for your name,” and you will have a, “…good experience at the MOPD”.

**Hypertension-specific perceptions**

*Hypertension identified and diagnosed after a significant incident*

In the MODP participants seem to be made aware of their health issues only after major negative health events such as a stroke, MI or severe headaches. One participant relayed her experiences about hypertension by saying, “…about six months ago I had a heart attack and now I must take all these medicines”. The majority of participants only became aware of health issues such as hypertension and the treatment thereof after, a significant clinical incident, as aptly noted, “….High blood pressure is really sneaky – I can now say I have it.” They explained that it took a clinical event with direct intervention such as a stroke, myocardial infarction or severe headaches to seek medical attention, “…I knew nothing, until I had a stroke”. Another participant openly stated, “… I never believed I was sick and put Disprin (aspirin) in my mouth, I tried to give up smoking and drinking and thought it would be better – it did not help and now I don’t do anything like that anymore”.

*Patient was healthy before being diagnosed with hypertension*

Participants usually presented as healthy before being diagnosed with hypertension and then after the clinical event they tend to passively accept their illness and submissively follow the prescribed routines. “…I don’t need anything now because I get my medicine”. Many of the participants were of the opinion
that they won’t develop hypertension, “…I was always a very healthy person, then in 2008 everything went wrong.”. Or, participants were uneducated regarding the basic lifestyle choices that could have assisted them in preventing hypertension, “…I never know one could get so sick”.

**Hypertension-related symptoms reported**

Participants also voiced that they accepted hypertension-related symptoms as well, such as headaches, dizziness, tiredness, even though they were on medication, “… God gave me these diseases and what can one do?” Multi-morbidities such as chronic obstructive pulmonary disease and cardiac failure were also seen. Furthermore, other co-morbidities such as diabetes and asthma and the use of Warfarin (anti-coagulant) were also casually incorporated and accepted. It was interesting that participants did not sound alerted or ever concerned when they experienced any warning symptoms their presenting illnesses, “… my head feels thick and I get a headache, so I decided to come to the hospital”; “… My head is sore, I feel dizzy and I feel so tired”. To these participants, life seems to continue within an ordered passive acceptance of the inevitable: old age brings on these afflictions. It seems that these participants do not realise that they can take charge of their lives and change these circumstances.

**Lack of support to elderly and frail patients**

Focus on medication not on vulnerability

This aspect is of great concern to many of the participants as they notice their fellow participants’ plight and show real concern, “…some of the old people are so sick that they cannot sit or stand for long periods. The sister must look out for these people and talk to them and see that they are helped quickly so that they can go home”. The participants show great understanding for the situation and are willing to stand back for the elderly and frail participants. The MOPD’s focus is on medication in chronic disease management and no other aspects of participants such as their vulnerability, frailty or socio-economic needs. From the participants’ discussion it once again became clear that the focus in the clinic revolved around medication adherence and any other health-related needs (beyond the scope of clinic) tended to be ignored reinforcing the clinics’ objective to the treat chronic disease. Elderly and frail participants were fully acknowledged by
the health professional staff and other participants and accommodated by assisting them first, reducing their long waiting times, providing them with limited refreshments and making way for their wheelchairs. However, no direct personal engagement with these participants was evident. It was problematic as these participants never had an opportunity to talk to someone and discuss their needs over and above their health situation.

Further referrals for elderly and frail participants tended to be absent. No one was there to assess other challenges these participants may face, such as economic, environmental or family problems. One participant stated that “…I care for my grandmother at home, my grandfather is also there, they are 74 and I bring my grandmother to hospital. There is no social worker we live”. It would be thought that at this clinic an ideal opportunity would be created to fully check-up and assess these old people, not only regarding the physical aspects. From the participant’s comments, it seemed that the clinic’s main objective is to treat chronic diseases and any referral of elderly or frail participants for additional assistance was lacking.

Family seemed to be the only support that these participants really mentioned and relied on. Participants explained that family are the only real support they have and that frail and vulnerable participants are totally dependent on their family for transport, assistance to and from the clinic, finances and general care. Younger generations therefore play a vital role in supporting the elderly, “…Yes, my children they look after me”.

The physical environment was also not conductive to elderly, frail or wheelchair bound participants. Immediate assistance for these participants tends to be lacking. Furthermore, due to overcrowding wheelchair access is impeded. In general, the MOPD environment remains problematic to wheelchairs, participants with physical limitations (those using walkers and crutches) with the seating being ridged and uncomfortable, the noise levels high and disturbing and the setting exhibiting an unhealthy overcrowded atmosphere.

Figure 1 provides a collective illustration of the research findings and portrays self-care of patients with hypertension as a medical management process bounded within the context of an overburdened public health system. Patients with hypertension enter this health system because of their dependence to obtain
medication free-of-charge and adhere to the health system processes and routines. Entering the health system was activated by a significant onset of hypertension and other co-morbidities. Once patients are absorbed into the clinical management of hypertension, they become committed to the routine and accept negative organisational factors. Within this clinic routine, patients receive health education limited to medication adherence and salt intake whilst patients’ needs that are unbefitting to the clinic routine cannot be addressed. Patients with hypertension are passive yet positive followers within the clinic routine. This figure is a graphic portrayal of the relationship between the themes and necessitates further development and confirmation but does provide the reader an understanding of the care, self-care, coping and needs of patients with hypertension in a public health system and where psycho-education as a health promotion strategy fits.

[Preferred position for Figure 1 Graphic presentation of patients with chronic hypertension within a public health system].

Discussion

The South African health system is in crises, with limited financial resources, manpower and equipment, all impacting on the health care user within the system. In an effort to ameliorate the situation it is suggested that health care users take more responsibility of their own health. The main purpose of the study was to explore the experiences of health care users in the system, in particular those who suffer from hypertension, regarding their care, coping and knowledge of, and experience with, the available resources in a medical out-patient department in a South African government public hospital.

Results from the study suggested that many health care users do face challenges, which makes their visits problematic, however overall, they are grateful for the service and present as fairly satisfied. However, various specific problems have been noted which do, at times, make visiting the clinic burdensome and challenging.

In general waiting times are long and tedious due to the large numbers of patients, also noted by Ameh et al. (2017:262). Furthermore, large patient numbers, staff shortages and negative staff attitudes in public
institutions have been noted (Ameh et al. 2017; Haskins et al. 2014; Nunu & Munyewend, 2016). The positive and negative organisational factors reported were aligned with literature. The negative aspects were more prevalent than highlighting positive or satisfying occurrences (Haskins, 2014; Khotatso et al., 2015; Nunu & Munyewende, 2016; Owolabi, et al., 2017). In this study the long waiting times, the lack of medication and the unconducive environment were acknowledged (Gray & Vawda., 2016; Haskins, et al., 2014; Le Roux & Couper, 2015) but other more positive incidents came through as ameliorating factors, which made the MOPD a sought after facility to obtain health care support in the DKK District.

The second theme, which identified patient-specific needs, reflected more of an in-depth humanitarian need of the patients to access sustenance while waiting in the queue after getting up early and waiting the entire day to see a doctor and to obtain medication. The need for sustenance seemed to outweigh concerns about actually receiving medication (stock outs) and the long waiting times. Furthermore, the concern for the elderly and frail came out strongly, giving the study a more personal human perspective of the patients. Specifically noted was also the patients who had co-morbid conditions (Waterhouse et al., 2017:2) such as diabetes who needed to eat regularly and the elderly who were away from their homes for long periods.

The emphasis on taking medication regularly, was evident, however any further education regarding side effects of the medication and how to cope with these aspects, seemed to be addressed only superficially. Resources regarding this matter amounted to posters on the walls and a few students that gave the patients information. Furthermore, specific patterns in health education themes amounted to three (3) very basic medical aspects, these being: reduce salt intake, take medication and do exercise, which was also evident in the literature (Koma & Lebelo, 2017: 38-39; Murphy, et al., 2015: 6).

Hypertension-specific perceptions, which reflect that taking medication timeously and regularly is the only way to progress and cope, is an opinion that is highly regarded by many of the patients in this study, with lifestyle changes, that should go hand in hand with this aspect, lacking (Koma & Lebelo, 2017: 39). Even though many other literature studies have focused more on life style changes (Chandrasiria, et al., 2016; Persoskie et al., 2014), in this study, these important aspects do not seem to have reached the ordinary rural patient, as only a few participants spoke more in-depth about changing their lifestyles.
Finally, the theme which concerns the lack of support to elderly and frail patients was not highlighted in the literature and can be considered a new finding as it seems that most clinics’ objective tends more towards assisting with the pharmacological management of hypertension and the holistic aspect of PHC is neglected.

Conclusions and recommendations

Patients with hypertension attending the MOPD are aware of the negative organisational factors but being able to obtain their medication free-of-charge is one of the biggest advantages that the patients verbalizes. Patient-specific needs were reflected in fragmented hypertension management, focused on medical management and neglecting psycho-social factors that impacted on patients’ treatment modalities. Even though patients with hypertension were able to acknowledge their specific needs in their treatment, they minimise these needs in favour of getting their medication free-of-charge. Health education in the MOPD focusses on medical management including pharmaceutical intervention and to a lesser extent on health promotion regarding healthy lifestyle and stress management. Patients’ perceptions of their hypertension vary, but generally adherence to medication regimes gives patients a false sense of security that their hypertension and general health are under control. Patients with hypertension fail to associate and respond to symptoms typically accompanying hypertension and often have to suffer a preventable complication to get the generic treatment regime reviewed. Many of the patients become aware of hypertension only after a significant medical incident and even thereafter, they are still not fully in tune with their bodies and the symptoms they experience which are associated with hypertension. Patients associate hypertension as part of life course and ageing and do not take responsibility for the management of their hypertension but shift the accountability onto the health system.

Recommendations include that the physical environment, filing system and staff shortage be re-evaluated, with a greater effort placed on communication and holistic patient care. Psycho-education, which highlights socio-economic factors, available resources and emphasis placed on the role of medical staff identifying patients who need multidisciplinary referrals. Education regarding available resources should be undertaken by all role players of the MOPD. Patients should also be educated regarding their rights and responsibilities.
as a patient. Psycho-education can play a role in transferring individualised applicable and appropriate information to assist the medical staff and the patients alike. Further lifestyle and alternative resource information must be provided for the patients in the same way as the clinic staff address the topic of medical management. Patients must be encouraged to take an active rather than passive role in the responsible management of their illness. In providing a psycho-educational knowledge base, health care users are empowered, patients make better and more appropriate lifestyle choices and finally the health service providers’ burden is reduced enabling them to focus more on the medical aspects as they will be working with informed patients. By generally improving and broadening a patient’s knowledge via psycho-educational interventions, health institutes can promote a better understanding of the disease, increase the level of acceptance and adherence to medication, within the patient, become more aware of the needs of the patients and the reality of the services that are available or unavailable and give these individuals a voice in their treatment, choices and lifestyles. Introducing appropriate, suitable information to patients about the organisations’ restrictions and limitations, will help them to appreciate and understand these restrictions. With this knowledge, patients should be more inclined to accept the circumstances, making it easier for them to understand and adapt their coping skills, self-care knowledge and resources. Understanding the bigger picture, means that acceptance will becomes a more intrinsic attitude as the patient sees themselves as a part of the system and not in conflict with it. Additionally, if a patient is at ease with their circumstances, coping with their disease can be more realistic with specific perceptions being either encouraged, if positive or set right, if negative. Here again psycho-education can play a role in the holistic support of the hypertensive patient and tailor make programmes to suite each patient’s specific needs. As there are tendencies to follow specific heath education themes, psycho-education can open up a new world to the patient and introduce them to a varied and holistic scope of support ranging from self-care (individual) to community (group) involvement, by providing adequate, applicable and appropriate education and knowledge. To ultimately see results, a wide range of support must include patients of all ages, families and communities, health staff, doctors and any other role player that are involved with the hypertensive patient. All which must aim at facilitating a wider understanding of how to live an optimal life, even with a chronic disease, such as hypertension, at any age, here psycho-education can play a major role.
In conclusion, psycho-education can be seen as the most cost effective and direct route to attaining self-care in hypertensive patients in a resource restricted health care system. It is thought that, with a stronger emphasis on educating patients about their disease, more positive results can be expected in the areas of medication adherence, healthier personal choices and a general improved lifestyle – all because the individual takes responsibility for their own lives and their self-care.

Limitations of the study

Presently in South Africa, there is a major debate on regarding the scope of practice of psychologists. Clinical psychologists are presently overwhelming the industry by restricting many other psychologists’ functional areas. It is with great sadness that I note that in the environment in which this study was done there are no other psychologists functioning on a permanent basis within the hospital and mental health issues are poorly neglected. After months of research in the resource restricted health system of South Africa it is with trepidation that I feel the results of study will be acknowledged or even accepted by my fellow Clinical Psychologists as the study was performed by an educational psychologist. It is with this in mind that I state that there are so many needs with so few psychologists.

Declaration of conflicting interests

As the researcher works at the hospital as the primary liaison person between the two main role players (NWU and the hospital), a conflict of interest regarding the research could be noted. However, as the researcher only plays an administrative role and does not have any professional involvement with the MOPD clinic, the conflict of interest was averted. Secondly, the researcher was not part of the recruitment process.
References


Date of access: March 2018.


Table 1 Profile of the MOPD at the participating hospital

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>RESULT</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient:doctor ratio</td>
<td>1:25</td>
<td>The ratio of medical doctors is on an average 1 doctor to 25 patients. This average can differ depending on various factors, for example the time of the month and the day of the week. Furthermore, if there are more interns that are at the hospital then there will more doctors available.</td>
</tr>
<tr>
<td>Patient:nurse ratio</td>
<td>1:25</td>
<td>This ratio stays fairly constant, as the nursing personnel are usually permanently placed at the MOPD.</td>
</tr>
<tr>
<td>Types of health workers employed</td>
<td>3 types</td>
<td>Registered Nurse Enrolled nurse Enrolled nurse auxiliaries</td>
</tr>
<tr>
<td>Amount of consulting rooms</td>
<td>4</td>
<td>Counselling rooms do at times double up as procedure rooms for example the drawing of blood.</td>
</tr>
<tr>
<td>The number of patients seen in a week</td>
<td>331</td>
<td>The number of patients that pass through the MOPD are again dependent on times of the year and the functionality of the surrounding clinics. Problems at clinic level does tend to increase patient numbers.</td>
</tr>
<tr>
<td>General waiting times at the MOPD</td>
<td>1-7 hours</td>
<td>The usual waiting time for a patient is usually about three hours to see a doctor and then another 2 hours to wait for medication. This is on a good day, however factors such as limited doctors and administration problems, such as getting files, which contributes the most to prolonged waiting times</td>
</tr>
<tr>
<td>Number of referrals per month</td>
<td>86</td>
<td>General referrals from other hospitals, and amount to about 86 new patients per month.</td>
</tr>
<tr>
<td>Amount of admissions from the clinic to the hospital</td>
<td>33</td>
<td>Referrals from the hospital and clinics in the area amounts to about 33 patients per month.</td>
</tr>
<tr>
<td>Common anti-hypertensives prescribed</td>
<td></td>
<td>Amlodipine Enalapril Hydrochlorothiazide</td>
</tr>
<tr>
<td>Themes</td>
<td>Sub-themes and categories</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| 1. Positive and negative organisational factors reported | Positive organisational factors that were present.  
- Hospital staff are friendly and approachable.  
- Health professionals are clinically capable.  
- General satisfaction with the treatment received.  

Participants had an appreciation for the positive organisational factors.  
- Acknowledge that they receive this service free-of-charge.  
- Realises that they can get their medication at the clinic.  
- Patients extremely grateful and appreciative.  

Negative organisational factors were present.  
- The inefficient filing system causes long waiting times.  
- Staff shortages present throughout the value chain.  
- Waiting times are too long (patients arrive before 7 am, leave after 6 pm).  
- Disruption and differences in patient’s care occurs between different clinics and different doctors.  
- Patients have to return sometimes due to unavailable medication (transport is expensive).  
- Physical environment of the clinic is not conducive to patients (lacks ventilation and natural light, overloaded, sitting on benches and cannot socialise).  
- Language barriers occur between patients and doctors. |
| 2. Patient-specific needs are identified | Majority of patients are satisfied, however:  
- Patients focus more on being satisfied and down-play dissatisfaction by rationalising that the service is free-of-charge.  
- Transport and lack of food are two tangible needs experienced by patients.  
- Patients focused and were confident that the pharmaceutical products (medication) worked and lost sight of relationships between health professionals and themselves.  
- Long waiting hours. |
| 3. Specific patterns in health education themes | Health education emphasis on medical management.  
- Health education is first about drinking medication every day at the same time; then decreased salt intake.  
- Patients in general are unaware of a healthy lifestyle and stress relief.  
- Patients aware of the presence of university students that engage with them.  
- Patients request more information regarding their diseases. |
| 4. Perceptions regarding coping with hypertension | Neutral acceptance of having a chronic disease.  
- Patients in general accept having hypertension.  
- Active denial of hypertension not detected.  

Getting and drinking medication is the critical factor in managing one’s chronic hypertension.  
- Drinking medication is the dominant coping strategy. |
<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes and categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Medication adherence implies to drink your medication every day, at the same time.</td>
<td></td>
</tr>
</tbody>
</table>
| **Becoming followers of the clinic’s routine** | • Getting medication is important enough to accept long waiting cues and medicine shortages.  
• Patients are scared to lose their place in the queue, so they remain with the routines. |
| 5. Hypertension-specific perceptions | **Hypertension identified and diagnosed after a significant incident** | • Hypertension diagnosed after major health events such as a stroke, myocardial infarction or severe headaches.  
• Patient was healthy before being diagnosed with hypertension. |
| **Hypertension-related symptoms reported** | • Patients experience hypertension-related symptoms whilst being on medication: headaches, dizziness, tiredness, multi-morbidities (diabetes, chronic obstructive pulmonary disease, and asthma) and cardiac failure. |
| 6. Lack of support to elderly and frail patients | **Focus is on medication, not on vulnerability** | • The clinic’s objective is to treat chronic diseases and ignores frailty.  
• Referral of elderly and frail patients absent.  
• Family is the only support to elderly patients and patients that are frail.  
• Physical environment not conducive for the elderly and frail patients.  
• Assistance to frail (wheel chair bound) or elder patients is lacking. |
Figure 1. Graphic presentation of patients with chronic hypertension within a public health system.
SECTION 4: EVALUATION, LIMITATIONS AND RECOMMENDATIONS

“Self-care is how you take your power back.”

4.1 Introduction

Firstly, this study set out to empower patients with hypertension in a public health system to practise and promote their self-care through psycho-education as a health promotion strategy. In order to achieve this aim, it was necessary to first understand patients with hypertension in the South African context as well as their interaction within the public health system in which they have to function.

4.2 Evaluation of the study and a self-reflection

The research problem was meaningful and significant as this study endeavoured to obtain explore the complete bio-psychosocial well-being and not just the absence of disease in a person with hypertension in the South African health care system. Health is determined by both intrinsic forces such as genetics, behaviour, culture, habits and lifestyles and extrinsic forces such as preventative, curative and promotional aspects (WHO, 1986). This study offered an alternative view which underscored this WHO (1986) statement and endeavoured to up hold this assumption by moving away from curative care to embrace more general health care promotion. This is in line with the South African National Health Promotion Policy and Strategy 2015–2019, representing the global shift towards “the process of enabling people to take control over, and to improve, their health” (WHO, 1986). Secondly, the involvement with the hospital community allowed the researcher to identify the gap regarding the roles that educational psychologists can play, by means of psycho-education. Psycho-education can potentially empower patients with hypertension to practise enhanced self-care. By understanding these patients’ experiences of the care that they received, their awareness of their own role in their disease management and self-care, their coping skills and the resources that they were aware of and which they utilised, all within the public health system, steps could be taken to devise interventions able to assist all role players in the MOPD.

The theoretical framework consisted of the integration of three models and was appropriate since it provided a sound horizontal base for the study as well as affording the opportunity to highlight in-depth aspects such as health care in the South African context and the role the individual plays or should play. (See figure 4.2 and 4.3)
The methodology was appropriate to the design as it underpinned the theoretical framework by obtaining applicable and appropriate data. The data formed an accurate image of patients’ views, perceptions and, most of all, their experiences regarding their self-care in the South African public health system. The sample and the setting again reinforced the initial aims of the study, which was to explore, describe and interpret hypertensive patients’ awareness of their self-care and interpret how patients with hypertension cope with this chronic disease as well as to describe and interpret what patients with hypertension require, their awareness and their utilisation of resources within a public health system.

The data collection proved fruitful in obtaining rich, thick information. This data, which when analysed, provided understanding and insight into the world of the patient who suffers from hypertension, allowed recommendations for psycho-educational interventions as a health promotion strategy to be formulated. This enabled empowerment of patients with hypertension to implement and practise enhanced self-care within a public health system.

There were no noteworthy ethics related factors that occurred during the study and data collection was done with the informed consent of all participants, knowledge of the hospital management and the North West Department of Health.

4.3 Self-reflection on the study

When reflecting on the study the most prominent image that comes to my mind is the overcrowded waiting room with hopeful humanity waiting patiently for the doctors to arrive. All faces are sombre, and no one actually looks at anyone else, everyone locked in their own world and hoping to finish up quickly and escape out into the sunshine and fresh air. Even asking patients to give me an interview broke the monotonous boredom and assisted in facilitating some sort of interaction. The patients present with a fear of losing their place in the line, or having their file placed at the bottom of the pile to such an extent that it makes patients sit for hours without food or even going to the bathroom, “just in case”.

Furthermore, boredom is a big problem as just sitting for hours and waiting creates mental and physical problems that are not addressed. Since the space is so limited that any movement inevitably creates a block in the traffic or flow of patients, elderly people and wheelchair patients. Another problem that was discussed was the files that were difficult to obtain. Administrative chaos is apparently evident in the archives where the files are stored and if a file is not requested early, the patient must lose their place in the queue and wait for the file to be traced, only then being able to see the doctor. Even though everything is done to facilitate a flowing system, patients often arrive without an appointment and then the staff must go and look for the file.
Through all these challenges, it was amazing to still experience the gratitude and thankfulness that the patients exuded. Most patients only had praise for the personnel and doctors in the department and conveyed a feeling of “coming home” to the clinic. Many patients were referrals from other hospitals and clinics and all remained adamant that this clinic was one of the best. Therefore, upon reflecting on this situation, I feel that we must do something to assist these patients and, if one can improve their self-care, there would not be quite as many critical, uncontrolled hypertensive patients in the clinic, which would ease the number of patients that attend. If patients have more knowledge of their disease, they can make better decisions, look after themselves better and know when it is critical to attend the clinic by applying self-care principles.

It must be mentioned that MOPD will be sending many of their stable patients to the Wellness clinic to alleviate many of the present overcrowding problems, which in turn would hopefully minimise the long waiting periods.

4.4 Bringing it all together: applying theory to practice

“A good health service must deliver safe, quality personal and non-personal health interventions to those who need them when and where they are needed with the minimum of waste of resources”. (World Health Organization Regional Office for the Western Pacific, 2018).

This study was based on three theoretical assumptions, namely the Health Systems Model (WHO, 2016), eco-systemic framework (Lindau et al., 2016:1873,1877; Yardley et al., 2015:2) and the middle-range theory of self-care in chronic disease management (Riegel et al., 2012). The Health Systems Model (WHO, 2016), eco-systemic framework (Lindau et al., 2016; Yardley et al., 2015) and middle-range theory of self-care (Riegel et al., 2012) are discussed as a conceptual framework according to which the model, framework and theory are integrated and applied to patients with hypertension, attending a MOPD in a public health system with the potential to benefit from psycho-education as a health promotion strategy.

4.4.1 Integration of the theoretical assumptions into a conceptual framework applied to patients with hypertension in a public health system

The Health Systems Model (WHO, 2016) presents the complexity in providing quality appropriate care as it highlights the need of core indicators of a public health system, which can be used to evaluate the system’s performance and formulate appropriate intervention strategies related to patients with hypertension. The Health Systems Model relates to the patient with hypertension attending the MOPD in need to be empowered to practise enhanced self-care as follows:
**Table 4-1: The 6 building blocks of the Health Systems Model (WHO, 2016) adapted to illustrate the influence on MOPD patients.**

<table>
<thead>
<tr>
<th>The public health system's building blocks</th>
<th>The patient at the MOPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and leadership</td>
<td>Promoting health policies on hypertension. Managing the resources in the MOPD.</td>
</tr>
<tr>
<td></td>
<td>Personnel’s knowledge available to patients at the MOPD.</td>
</tr>
<tr>
<td></td>
<td>Personnel’s leadership skills available to patients at the MOPD.</td>
</tr>
<tr>
<td>Health care financing</td>
<td>Number of personnel allocated to MOPD.</td>
</tr>
<tr>
<td></td>
<td>Resources allocated to the patients at MOPD.</td>
</tr>
<tr>
<td></td>
<td>Ensuring free medication and services for MOPD patients.</td>
</tr>
<tr>
<td>Health information and research</td>
<td>Filing and administrative system for patients at MOPD.</td>
</tr>
<tr>
<td></td>
<td>Health information for patients at MOPD (e.g. blood results and X-rays).</td>
</tr>
<tr>
<td></td>
<td>Latest information regarding the treatment of hypertension available to patients at MOPD.</td>
</tr>
<tr>
<td>Health work force and human resources</td>
<td>Adequate staff to give personal attention to patients at MOPD.</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>Medicines must be available for the patient at MOPD so that they do not have to return medication that is out of stock.</td>
</tr>
</tbody>
</table>
The public health system's building blocks | The patient at the MOPD
---|---
Service delivery | Good service delivery is the delivery of effective, safe, quality personal and non-personal health interventions to those who need them, when and where they are needed, with minimum waste of resources. | Knowledgeable, competent staff who are able to respond and provide a quality service to the MOPD patient. Well-trained staff who can medically assist MOPD patients (e.g. taking blood pressure).

Furthermore, when integrating the building blocks of the Health Systems Model into the health care system of the MOPD, it is evident that the Health Systems Model is a series of building blocks, integrated with and reliant on each other (see Figure 4.1). This system is so mutually dependant on each sub-system that if one of the sub-systems does not function properly, all other facets are affected, resulting in a direct negative impact on the MOPD patient.

Figure 4-1: The integration of the Health System Model with the patient at the MOPD clinic

The eco-systemic framework was consulted since it acknowledges and advocates the bio-psychosocial interconnectedness between the individual and the external world as well as all systems that could in any way influence this connectedness. To illustrate the connection between
the eco-systemic framework and Health Systems Model, it is of paramount importance that the individual who is an integral part of the systems is acknowledged, empowered and given a voice.

![Health Care Diagram]

**Figure 4-2: The integration of the Health System Model with the patient’s Eco-Systemic lifeworld**

The eco-systemic framework applied to the patient with hypertension attending the MOPD clinic can be seen throughout the patient’s eco-systemic levels of functioning (See Figure 4.2). The integration of the Health Systems Model and the eco-systemic framework can be noted in a patient’s Micro level where the individual themselves are in contact with the Meso level of the hospital environment (MOPD). This can further be seen when the hospital environment (MOPD) is directly influenced by the Macro level (the six (6) pillars of the Health Systems Model) where any changes here will directly influence the functioning and service delivery in the MOPD. These systems are further influenced by the Exo level, which can be seen as the overall health system in South Africa. With the provision of knowledge and information, the individual, in their micro system, can already make positive choices and begin to change their lives. A well-performing health workforce (Meso system) who are responsive to the patient within the micro environment can create and initiate change in each individual. The individual (Micro level) can also enrich the Meso level by their uniquely individual contributions. With good service delivery and an adequate health work force supported and connected to a well-functioning information and research
system, a good and constant supply of essential medicines and technologies, adequate finances and strong leadership and governance, much value can be added to the entire system - Micro, Macro, Meso and Exo systems.

To realise the potential of the ideal situation of eco-systemic interdependence the patient must be informed about his/her role in the bigger picture. Therefore, the patient must be inspired to take personal control and to be educated to perform self-care. The middle-range theory of self-care is thus visited in order to provide knowledge and information, which will empower the individual in a resource restricted health system. It was done in an effort to improve hypertensive patients’ care and coping skills and to inform them of all available resources. The middle-range theory of self-care involves three facets or processes, self-care maintenance, self-care monitoring and self-care management, all focusing on the individual patient taking responsibility for managing his/her own disease. Thus, in marrying these frameworks, the individual is the pivotal role player who needs to take on an active role in taking control of their health, their decisions and their lifestyles. Therefore, to promote self-care, empowerment of an individual is crucial, encouraging care, coping and the utilisation of available resources, thus making patients active role players in the South African health system.

In conclusion, one cannot take any one of these frameworks into consideration or isolate one as the best option since Health Systems Model, for example, is not patient-centred, even though it does influence the patient. Therefore, one must consider health service delivery as a complex and convoluted system, dependent on the building blocks of the Health Systems Model, influenced by the eco-systemic framework and inclined towards the middle-range theory of patient’s self-care in order to alleviate the overburdened system. The interdependence between the levels in a patient’s life in the eco-systemic framework, is very applicable in the management of chronic diseases, especially important when considering the social determinants of health (factors outside the patient). Thus, self-care is important to enhance a patients’ control over their own health which, in the current health system, is not really provided for. This in its self is a strong motivation for psycho-education within the entire South African health system.

Self-care can be directly promoted by psycho-education in the following ways:

The incorporation of psycho-educational interventions to the routine clinical procedures, throughout the patient’s eco systems adds knowledge, information and enlightens the individual as to their role in the management of their disease and assists them to employ self-care strategies which can also strengthen the six (6) building blocks in the Health Systems Model (See Figure 4.3)
Figure 4-3: Adding the middle-range theory of self-care to the Health System Model and the eco-systemic world of the individual.

Including aspects of teaching, learning and education that would empower the patient to take the lead in managing his/her own health, psycho-education can promote self-care by improving the patient’s awareness of their needs, available resources and strengthen their coping strategies, in turn enabling these patients to request the necessary services discerningly. Psycho-education can promote self-care, which can alleviate patient dependence on a resource restricted health system.

With this information, it was therefore possible to embark on an effort to ameliorate the existing situation by employing psycho-education in empowering the patient in their self-care practices.
Figure 4-4: The promotion of self-care by psycho-educational interventions.

Recommendations

The recommendations that resulted from this study are of a practical nature, attainable by all role players in the South African public health system. In considering all the aspects, the universal constant element that is evident is the individual. This element has the control to influence all the other spheres of functioning. With this in mind, the researcher would like to suggest that the promotion of self-care for hypertension and other chronic diseases can be effectively implemented through psycho-education. Self-care facilitates the individuals' management, monitoring, maintenance of themselves and their situation, which can only be achieved through education, teaching and learning. To promote this idea the following aspects are suggested for the various role players.
4.4.2 Recommendations to enhance self-care of patients in public health systems related to organisational factors

To accommodate patients’ need for optimal care, the patient’s coping skills and knowledge of the available resources, requires a level of information and education. Thus, a level of information and knowledge (education) should be available to patients. Furthermore, for any patient to take responsibility for their predicament they need to be able to “self-care”, including the monitoring, managing and maintaining their own disease, which can be supported by psycho-educational interventions.

In order to build upon the present good relationship patients have with the MOPD staff, more must be done to encourage a better, free flow of information between hospital staff and patients. Communication will promote a better understanding and acceptance of the limitations and problems encountered within the system, and also encourage patients to suggest changes and give input. Psycho-educational interventions can be provided to increase the knowledge of self-care within the organisation which will have positive implications for staff and patients alike. More staff are needed since the distinct lack of personnel has led to many services being ignored. An increase in medical personnel would alleviate the intense stress experienced in the MOPD by the increasing number of patients.

4.4.3 Patient-specific recommendations to enhance self-care in public health systems

Life-long learning is accepted widely as a naturally occurring phenomenon. Therefore, during an individuals’ lifespan the learning process repeatedly occurs resulting in that individual continually having to learn about themselves, their situation and their environment. Learning does not stop at a certain age or developmental milestone. For educational psychologists, educating patients about their chronic disease must be seen as part of an adult or even an elderly person’s learning process, which must be incorporated into their mental and physical adaptations and changes on their lifespan development path. Specific self-care actions and behaviours can be explained and taught to patients and their families to encourage the management, monitoring and maintenance of the hypertension in MOPD patients. Workshops, support groups and individual sessions can be used to spread the worth of self-care and encouraging patients to take responsibility for their choices and actions.
4.4.4 Recommendations in the specific management of hypertension with the aim to enhance self-care of patients with hypertension (perceptions addressed here as well)

For the patient that experiences health problems due to ignorance regarding his condition, there is no excuse not to be able to request professional help in acquiring the necessary knowledge. If hypertensive patients have this knowledge and understand its importance, then they will be empowered to take a more active role and responsibility in the control of their disease and be able to rationally monitor themselves in coping with their own lives. It therefore goes without saying that patients will improve their own care, present with more enhanced coping skills and have a better understanding of the resources at their disposal with education and knowledge.

Patients must be empowered to take charge of their condition and make the necessary commitment to lifestyle changes and not rely so heavily on medication. Symptom identification is a basic necessity to enable patients to take the appropriate actions when they monitor their condition. As this can be taught to the patients and alternative actions suggested, education is once again suggested. Serious symptoms will then recognised, and timeous medical treatment sought before complication set in without incurring higher medical costs and even mortality. Controlled and stable patients who show a satisfactory level of self-care can also be provided with medication for longer periods reducing the need to frequently visit the clinic.

4.4.5 Recommendations to enhance patients with hypertension coping strategies attending a public health system

Patients must be knowledgeable about information regarding the resources within the health system. Knowledge is power, and this can lead to patients' taking a more active role and creating their own strategies to cope with their condition. If a patient knows what is available, they will be enabled to make good choices when seeking assistance. Posters, pamphlets, action and support groups can be established to encourage the spreading of information. Visual media can be pre-recorded and repeatedly played to patients attending MOPD.

4.4.6 Recommendations to enhance self-care of elderly patients with hypertension in the public health system

Self-care can be done by everyone in their own unique way. Elderly patients must be encouraged to do whatever they can to remain independent and healthy. There can be days when only the
elderly patients are seen during a certain time and afterwards the clinic continues with their routines. During these times specialised information can be provided to the patients and input by social workers provided to ensure the elderly patients are cared for. When planning, everyone will know to schedule their MOPD appointments at other times which will alleviate the pressure in the confined environment of the clinic. Medication can also be given for longer periods, reducing the need for stable and controlled patients to frequently visit the clinic.

4.4.7 Recommendations to enrich the training of multi-disciplinary team

The awareness of the role that can be played by educational psychologists in educating hypertensive patients must be acknowledged and utilised by all health workers. Functioning in a transdisciplinary team, the psychological aspects of hypertensive patients can and should be managed by experts on human developmental, and who better than an educational psychologist. By implementing psycho-educational interventions, the health system in South Africa as well as the individual can be supported in all the facets of his/her life.

The MOPD at Potchefstroom Hospital, firstly needs a multi-disciplinary team to support the medical staff, as many patients’ socio-economic and mental problems are overlooked. Training should begin with the permanent staff in order to ensure that they can make accurate calls and refer the patients to other disciplines for holistic and specialised support. Other team members must be trained to effectively assess patients’ needs and also make appropriate referrals. Training in a self-care programme is essential in order that everyone has guidelines to assess the patient’s self-care functioning.

4.4.8 Recommendations regarding the Integrated Chronic Disease Manual (Department of health, 2014)

In the integrated chronic disease manual, section 6 is allocated to “assisted self-management” whereby patients are encouraged by the community health worker to take responsibility for their own health and well-being. It is stated that community health workers (CHWs) will provide health education and health promotion, which includes information on healthy eating habits, appropriate exercises, reducing tobacco, snuff, alcohol and salt intake. This very limited information does not actually describe how the CHW must go about educating the patient. The ICDM guidelines (Department of health, 2014) can add self-care to this section, which can empower the patient and the CHW by spelling out how the patient can manage, monitor and maintain their health.
4.5 Limitations of the study

The study was limited due to the circumstances at the MOPD where many of the patients were not able to fully communicate due to language barriers and also due to constant interruptions.

4.6 Summary

This section was aimed at the evaluation of the study’s findings and proved that there is a gap in terms of the self-care of hypertensive patients and that psycho-educational interventions can and do fill this gap in health promotion.

With this section the study is concluded and self-care in hypertensive patients in the South African context is seen to definitely enhance patient knowledge, responsibility and generally empower the individual. Furthermore, psycho-educational interventions can play a role in health promotion with these patients, which does make a big difference in lightening the burden of this disease in PHC.
REFERENCES


ADDENDUM 1: GOODWILL PERMISSION FROM CEO

To: Dr. Lynn Preston  
North West University

From: Dr. JMM Shakung  
Clinical Manager  
Potchefstroom Hospital

Dear Dr. Lynn Preston

This is to inform you that the Potchefstroom Hospital Patient Safety Group (PSG) that sat on 10/10/2017 has given you permission to proceed with your research titled: “Empowering patients with hypertension in a public health system through psycho-education towards enhanced self-care.

We wish you all the best with your research and look forward to sharing in the results of your findings.

Sincerely,

[Signature]

Dr. JMM Shakung  
Clinical Manager  
Potchefstroom Hospital
ADDENDUM 2: ETHICAL CLEARANCE CERTIFICATE

ETHICS APPROVAL CERTIFICATE OF STUDY

Based on approval by Health Research Ethics Committee (HREC) on 16 November 2017, the North-West University Research Ethics Regulatory Committee (NWU-RERC) hereby approves your study as indicated below. This implies that the NWU-RERC grants its permission that provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Empowering patients with hypertension in a public health system through psycho-education towards enhanced self-care

Study Leader/Supervisor: Prof P Bester
Student: LD Preston-10521402

Ethics number: NWU-C0007S17-A1
Application Type: Single study
Commencement date: 14/09/2017

Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.

General conditions:
While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:
- The study leader (principal investigator) must report in the prescribed format to the NWU-RERC via HREC:
  - annually (or as otherwise requested) on the monitoring of the study, and upon completion of the study
  - without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study
- Annually a number of studies may be randomly selected for an external audit.
- The approval applies strictly to the proposal as stipulated in the application form. Should any changes to the proposal be deemed necessary during the course of the study, the study leader must apply for approval of these amendments at the HREC prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the study may be started.
- In the interest of ethical responsibility the NWU-RERC and HREC retains the right to:
  - request access to any information or data at any time during the course or after completion of the study,
  - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.
  - withdraw or postpone approval if:
    - any unethical principles or practices of the study are revealed or suspected,
    - it becomes apparent that any relevant information was withheld from the HREC or that information has been false or misrepresented,
    - the required amendments, annual (or otherwise stipulated) report and reporting of adverse events or incidents was not done in a timely manner and accurately,
    - new institutional rules, national legislation or international conventions deem it necessary
- HREC can be contacted for further information or any report templates via Ethics.HREC@nwu.ac.za or 012 299 1096.

The RERC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the RERC or HREC for any further queries or requests for assistance.

Yours sincerely,

Prof. Refilwe Phawana-Maluya
Chair NWU Research Ethics Regulatory Committee (RERC)

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ADDENDUM 3: NW PROVINCIAL DEPT OF HEALTH

Lynn Preston - National Health Research Database: Important Information

From: "NHRD Support (DO NOT REPLY)" <nhrd@hst.org.za>
To: <10521402@nwu.ac.za>
Date: 2017/10/05 10:33
Subject: National Health Research Database: Important Information

Dear Lynn,

This email confirms that we have received your application (NW_201708_005).

The status of your application has changed.

The new status is: "Approved".

Please log in the NHRD at nhrd.hst.org.za to access your approval letter.

Regards
North West Health Research Committee

Disclaimer and confidentiality note:

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file://C:/Users/P10521402/AppData/Local/Temp/XPgrepwise/59D60A94PUKD1PCM... 2017/10/09
ADDENDUM 4: HREC ETHICAL CLEARANCE 1

To whom it may concern

APPROVAL OF THE RESEARCH STUDY FROM THE HEALTH RESEARCH ETHICS COMMITTEE (HREC) OF THE FACULTY OF HEALTH SCIENCES

Ethics number: NWU-00079-17-S1

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the Health Research Ethics Committee (HREC).

Study title: Empowering patients with hypertension in a public health system through psycho-education towards enhanced self-care

Study leader/supervisor: Prof P Bester

Student: LD Preston-10521402

Application type: Single study

Risk level: Medium

You are kindly informed that this application was reviewed at the Health Research Ethics Committee meeting held on 14/06/2017 of the Faculty of Health Sciences. Following review of the application, it has been decided that the study is approved. Approval in this letter means that final ethics approval was indeed granted for the research methodology and the ethical aspects of this study and that the HREC has no further ethical concerns relating to the research-ethics process, except for the outstanding documentation from you, which must be provided to the HREC by the researcher. It is important to mention that this letter indicates that there are no further ethical concerns that exist regarding the execution of the research. A final ethics certificate will be issued upon the receipt of the following documentation:
a. A copy of the approval letter from you as the representative of the provincial Department of Health
b. A copy of the goodwill permission letter from you as the representative of the district Department of Health
c. A copy of the goodwill permission letter from you as the CEO of the hospital to be approached

The mentioned document, as indicated above, should be submitted to Ethics-HRECProcess@nwu.ac.za by the researcher, for review before the ethics approval certificate can be provided.

This approval is provided for a year, after which continuation of the study is dependent on receipt of an annual (or as otherwise stipulated time frame) monitoring report and the concomitant issuing of a letter of continuation for another year.

If you have any questions or need further assistance, please contact the Faculty of Health Sciences Ethics Office for Research, Training and Support at Ethics-HRECApply@nwu.ac.za.

Yours sincerely

[Signatures]

Prof Wayne Towers
HREC Chairperson

Prof Minnie Greeff
Ethics Office Head
ADDENDUM 5: POSTER

**TALK TO US ABOUT YOUR BLOOD PRESSURE (HIGH BLOOD)**

**HIGH BLOOD**

**Caring for yourself with your high blood**

We want to do research about how patients with hypertension (high blood pressure, high blood) care for, cope with and live having this disease. If you are 18 years and older and have high blood, then come and talk with us. Interviews will be at the hospital and will not take longer than 60 minutes. Interviews will be done when are already at the hospital waiting to see the doctor or to get your medicine. You will need to sign an informed consent form. We will give refreshments during the interview. The interviews will be recorded.

**Contact person**

Sister Jonette Potgieter MOPD clinic

**THE RESEARCHERS:**
Dr Lynn Preston and Prof Petra Bester

018-299 2094

lynn.preston@nwu.ac.za

petra.bester@nwu.ac.za

Care for your high blood

We want to hear your story

Come and talk with us

We can talk when you wait to see the doctor

30-60 minutes
ADDENDUM 6: INTERVIEW SCHEDULE

Note to the interviewer: as the population does not usually use the term “hypertension” and “coping” it would be appropriate and acceptable in some instances to use the terms “high blood” and “getting through or what do you do” respectively.

Introductory sentence: You have been attending the hospital’s MOPD clinic for your hypertension (high blood) for some time now and I want to ask you the following questions about the hospital and about you:

1. How do you experience the care that you get from the hospital for your hypertension (high blood)?
2. How do you care for yourself with this hypertension (high blood)?
3. How do you get through with this illness (high blood) or what do you do in your life to get through this illness?
4. What resources here at the hospitals do you know are available to help you with your hypertension (high blood)?
5. What resources from the hospital do you use to help you with your hypertension (high blood)?
6. What researchers do you need to help you with your hypertension (high blood)?
ADDENDUM 7: APPLICATION TO CONDUCT RESEARCH

ANNEXURE C: REQUEST FOR PERMISSION TO THE CEO TO DO RESEARCH

Private Bag X8001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

Africa Unit for Transdisciplinary Health
Research (AUTHer)
Tel: 018-299-2094
Email: petra.bester@nwu.ac.za

03 August 2017

The Chief Executive Officer
Potchefstroom Hospital
Kruis Street
Potchefstroom

Dear Ms Thlapi

REQUEST PERMISSION TO CONDUCT RESEARCH

I am currently registered for a master’s degree (MHSc in Transdisciplinary Health Promotion) at the North-West University (Potchefstroom Campus). My research title is: “Empowering patients with hypertension in a public health system through psycho-education towards enhanced self-care”. I have been granted approval to undertake this research by the Health Research Ethics Committee of the North-West University, certificate number: NWU-00079-17-S1.

The aim of this research is to explore, describe and interpret how patients with hypertension experience the care rendered by the MOPD clinic, their awareness of their own care (self-care), their coping with hypertension and their resources (awareness and utilisation thereof) as well as their needs in order to inform how psycho-education can empower these patients towards enhanced self-care as part of a health promotion strategy.

Please find attached the proposal for the research. The inclusion criteria of prospective participants will be conveyed to the mediator to assist the researcher with participant recruitment. Data collection involves semi-structured, individual interviews that will be digitally voice-recorded as well as the completion of a short demographical survey. The interviews will last between 30 to 60 minutes. An estimated 15 participants will be included and data collection will occur in August/September 2017. The researcher will conduct the interviews herself on the premises of the hospital.

Participation in the research will be entirely voluntary and participants are free to decline the invitation to participate. If participants decline, they will not be negatively affected in any way. Participants are free to withdraw from the research at any time, even after initially agreeing to take part. The researcher will work through management, the CEO (gatekeeper) and operational manager (mediator) in order to obtain access to the participants.
Once participants consent, the researcher will contact each participant to schedule an appointment for data collection. The time of the interview will be aligned with both the participant and hospital staff according to the in-hospital programme. Therefore no interviews will interfere with the hospital's programme and interviews will only be scheduled during participants’ clinic time. Data collection will occur within the hospital’s premises. This location will be a quiet environment or separate room with a closed door in order to ensure privacy.

There is no anticipated physical or emotional harm for any of the participants and all information related to the hospital and the participants will remain confidential. The researcher will make use of data coding to ensure anonymity of all participants. Should there be any unforeseen emotional response during the interview, the interviewee will immediately refer the individual for counselling.

From the information declared above; I, the researcher hereby request the following:

1. Written and signed permission to perform this research at the MOPD clinic.

2. Allow that the MOPD clinic’s operational manager can act as mediator to assist me with participant recruitment.

3. Allow me to present posters and leaflets about the researcher on the premises of the hospital to ensure that all prospective participants were informed to participate.

4. Consent to utilise the Education Psychology Support Services facility to conduct the interviews.

5. The hospital’s preferred method of feedback of the research besides a hard copy report.

6. The hospital’s monitoring and feedback process in order for me to know when and how to report on the progress of this research.

Any questions may be directed to me or to my supervisors, the contact details are declared in this letter.

Yours sincerely,

Dr Lynn Preston  
Senior Lecturer and Postgraduate Student  
063 252 7763  

Prof Petra Bester  
Research Supervisor  
082 298 2567
ADDENDUM 8: INFORMED CONSENT

INFORMED CONSENT FOR PARTICIPANTS WILLING TO PARTICIPATE IN SEMI-STRUCTURED, INDIVIDUAL INTERVIEWS

TITLE OF THE RESEARCH: Empowering patients with hypertension in a public health system through psycho-education towards enhanced self-care

ETHICS REFERENCE NUMBER: NWU-00079-17-S1

PRINCIPAL INVESTIGATOR: Prof Petra Baster

POST GRADUATE STUDENT: Dr Lynn Preston

ADDRESS: North-West University (Potchefstroom Campus), Building C8, Room 233.

CONTACT NUMBER: 083 262 7763

You are being invited to take part in a research that forms part of a research project that is required for the Master’s Degree in Transdisciplinary Health Promotion. Please take some time to read the information presented here, which will explain the details of this research. Please ask the researcher or person explaining the research to you any questions about any part of this research that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Also, your participation is entirely voluntary and you are free to say no to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the research at any point, even if you do agree to take part now.

This research has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU-00079-17-S1) and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (Department of Health, 2016) and other international ethical guidelines applicable to this research. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research all about?

- This research will be conducted at the hypertension (high blood) clinic at the hospital. You will be invited to talk to the researcher in an interview. The interview will be recorded. The researcher is trained to talk with you. There will be around 15 people needed to talk in the interviews.

- We want to hear from you, how do you feel about the care that you get from the hospital for your hypertension (high blood); how do you care for yourself with your hypertension (high blood), how do you get through with life with your hypertension (high blood) and the resources to help with the hypertension (high blood).

HREC General WICF Version July 2016
Why have you been invited to participate?
- You are 18 years or older, have hypertension (high blood) and attend the clinic at the hospital.
- You have hypertension (high blood) for at least six months now.
- You can speak English or Afrikaans.
- You are willing to sign informed consent giving permission for the researcher to record the interview.

What will be expected of you?
- Speak with Sister Jonette Potgieter and ask about the research.
- Complete the consent form.
- On completing these forms you will be put in touch with the researcher who will arrange for the interview to take place.
- The interview will take about 30-60 minutes and during and after the interview you will be provided with refreshments.
- Explain to the researcher how you want to get feedback about the research.

Will you gain anything from taking part in this research?
There is nothing that you can gain directly for taking to a researcher. But you might learn some new things about hypertension (high blood) which can help you to care for yourself.

Are there risks involved in you taking part in this research and what will be done to prevent them?
There might be some risks involved for you when you partake in this research. But read with us what these risks might be and how we can handle it together:

<table>
<thead>
<tr>
<th>You might feel a bit tired and maybe bored talking with us.</th>
<th>The interviews will not be longer than an hour and during this time, we will make sure that you sit comfortable, have some refreshments and if you are feeling too tired, we will stop the interview.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maybe you can get a headache and you might think it is because of your hypertension (high blood).</td>
<td>We will walk you back to the MCPD to ask the nurse to measure your blood pressure immediately and to refer you to the professional nurse or medical doctor to examine you.</td>
</tr>
<tr>
<td>Maybe talking with us makes you emotional, than you feel like crying or feeling sad and these are feelings that you don’t want to have.</td>
<td>Remember that we want to talk to you about your hypertension (your high blood) and not your personal life. We won’t ask personal questions to upset you. But should you feel emotional, we can stop the interview and we can refer you for counseling at the hospital, free of charge.</td>
</tr>
<tr>
<td>It can be a risk that you don’t actually want to talk to us but you feel pressured by the staff.</td>
<td>Even if you signed the form to talk to us and you still don’t want to talk, then we will stop the interview and there will be no discrimination.</td>
</tr>
<tr>
<td>Coming to the hospital is already taking a lot of your time. Now you might feel the this interview is taking up more time.</td>
<td>When we planned this research, we wanted to see how we can talk with you whilst you have to wait in the que at the hospital. We will make an appointment with you that will suite your time and programme and this can be on the same day that you want to get your medicine from the clinic.</td>
</tr>
<tr>
<td>You might be afraid that other people see that you talk to us about your hypertension (high blood).</td>
<td>As you wait to see the doctor or nurse and the clinic, you can come and talk to us about your hypertension (high blood). We cannot prevent people to see that you wait for treatment at the MCPD clinic. But, we can make sure that people don’t see that you talk to us as we will be in a private office and there is no specific waiting room outside this office. You will simply come and talk to us and go back to your place in the que. We will not link your name to the research results. All the information will go into one big book of data and your name will be replaced with a code.</td>
</tr>
</tbody>
</table>

How will we protect your confidentiality and who will see your findings?
- Nobody will be able to link your name to your interview.
- Your privacy will be respected by, once again, not including any identifying details of yourself in the interviews. The interviews will be given numbers so no one besides the researcher, will know who the numbers belong to.
• All your information will be kept confidential with codes after they are transcribed. These transcriptions will only have the relevant information that was given and no information that will reveal who gave the information.
• Only the researchers and members the research team will be able to look at your findings. Furthermore when the data (information from all the interviews) is anonymised (all identifying detail excluded) the data base will be available to other researchers who want to use the information.
• Consent will only be given to these researchers if they apply in writing to the HREC and follow all ethical procedures as specified by this ethical committee.
• Findings will be kept safe by locking hard copies in cupboards in the researcher’s office and for electronic data it will be password protected. As soon as data (information from the interviews) has been transcribed it will be deleted from the recorders and an anonymised data base will be kept for other researchers. Data will be stored for 6 years thereafter all data will be destroyed, electronic and hard copies.

What will happen with the findings?
The findings of this research will be used for this research and also for future studies that may require the information regarding the views of patients with hypertension (high blood) in a public health system. However it must be understood that whoever requests the use of the information it will be done through HREC and will fully conform with this committee’s requirements for the use of this data.

How will you know about the results of this research?
We will give you a brochure that explains the results once this research is completed.

Will you be paid to take part in this research and are there any costs for you?
You will not get any money for talking to the researcher. As you are already at the clinic you will not need reimbursement for travelling. Refreshments will be served during and after the interviews as a token of appreciation for your participation.

Is there anything else that you should know or do?
• You can contact me (Dr Lynn Preston) at 083 252 7753 if you have any further questions or have any problems. Alternatively you can contact my supervisor (Prof Petra Bester) at 082 298 3567.
• You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1209 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.
• You will receive a copy of this information and consent form for your own purposes.
Declaration by participant

By signing below, I …………………………………………………., agree to take part in the research titled: Empowering patients with hypertension in a public health system through psycho-education towards enhanced self-care

I declare that:

- I have read this information/it was explained to me by a trusted person in a language with which I am fluent and comfortable.
- The research was clearly explained to me.
- I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.
- I understand that taking part in this research is voluntary and I have not been pressurised to take part.
- I may choose to leave the research at any time and will not be handled in a negative way if I do so.
- I may be asked to leave the research before it has finished, if the researcher feels it is in the best interest, or if I do not follow the research plan, as agreed to.

Signed at (place) ……………………………………… on (date) …………………… 20…

Signature of participant  Signature of witness

Declaration by person obtaining consent

I (name) ………………………………………………… declare that:

- I clearly and in detail explained the information in this document to ……………………………
- I did/did not use an interpreter.
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (place) ……………………………………… on (date) …………………… 20…

Signature of person obtaining consent  Signature of witness
Declaration by researcher

I, Dr Lynn Preston declare that:

- I explained the information in this document to Sister Jonette Potgieter (mediator at the MOFO Potchefstroom Hospital hypertension clinic) who has been fully informed regarding the process that will be followed in this research.
- I did not use an interpreter.
- I encouraged her to ask questions and took adequate time to answer them and was also I was available should she want to ask any further questions.
- The informed consent was obtained by an independent person Sister Potgieter.
- I am satisfied that she adequately understands all aspects of the research, as described above.
- I am satisfied that she had time to discuss it with others if she wished to do so.

Signed at (place) ........................................ on (date) ......................... 20...

Signature of researcher  Signature of witness
INGELIGTE TOESTEMMINGS VIR DEELNEMERS WAT BEREID IS OM DEEL TE NEEM AAN SEMI-GESTRUKTUIERDE INDIVIDUELE ONDERHOUDE

TITEL VAN DIE NAVORSINGSTUDIE: Bemagting van pasiënte met hipertensie in ‘n publieke gesondheidsorg seiseli na verhoogde selfsorg deur middel van psigo-opvoeding / Empowering patients with hypertension in a public health system towards enhanced self-care through psycho-education

ETIEK VERWYSINGSNOMMER: NWU-00079-17-S1

HOOFNAVORSER: Prof Petra Bester

NAGRAADSE STUDENT: Dr Lynn Preston

ADRES: Noordwes-Universiteit (Potschefstroomkampus), Gebou C6, Kamer 233.

KONTAKNOMMER: 063 252 7763

Jy word uitgenoem om deel te neem aan die navorsing wat deel vorm van ‘n projek wat vereis word vir ‘n gedeelte van ‘n Meestersgraad wat ek voltooi in Transdisciplinaire Gesondheidsbevordering. Neem asseblief jou tyd om die inligting wat hier verskaf word te lees. Dit sal die detail van die navorsing verduidelik. Vra asseblief enige vrae oor enige gedeelte van die navorsing wat jy nie heeltemal verstaan nie aan die navorser of persoon wat die navorsing aan jou verduidelik. Dit is baie belangrik dat jy heeltemal tevrede is dat jy duidelik verstaan waaroor hierdie navorsing gaan en hoe jy betrokke kan wees. Verder is jou deelname heeltemal vrywillig en jy het die vryheid om nee te sê vir deelname. Indien jy nee sê, sal dit jou nie op enige manier negatief afgleyt nie. Jy is ook oor die van die navorsing te ontrek op enige stadium, selfs indien jy nou instem om deel te neem.

Hierdie navorsing is goedgekeur deur die Gesondheidsnavorsingsetiekkomitee van die Fakulteit van Gesondheidswetenskappe van die Noordwes-Universiteit (NWU-00079-17-S1) en sal uitgevoer word volgens die etiese riglyne en beginsels van etiek in gesondheidsnavorsing (soos in die Beginsels, Prosesse en Strukture dokument van die Nasionale Departement van Gesondheid, 2015) en ander internasionale etiese riglyne wat betrekking het op hierdie navorsing. Dit mag nodig wees vir die navorsing dat die etiekkomiteelede of ander relevante persone die navorsingsreksords inspreek.
Waarom gaan hierdie navorsing?

- Hierdie navorsing gaan uitgeoefen word by die hipertensie (hoë bloeddruk) kliniek by die hospitaal. Jy sal uitgenoem word om met 'n navorser te gesels in 'n onderhoud. Die onderhoud sal opgeneem word.
- Ons wil graag by jou hoor hoe jy oor die sorg wat jy by die hospitaal kry vir jou hipertensie (hoë bloeddruk), hoe sorg jy vir jouself met jou hipertensie (hoë bloeddruk); hoe cope jy met jou hipertensie (hoë bloeddruk) en wat se tipe hulp het jy nodig omdat jy hipertensie (hoë bloeddruk) het.

Hoe kom is jy uitgenoem om deel te neem?

- Jy is 18 jaar oud of ouer, jy het hipertensie (hoë bloeddruk) en jy woon die kliniek by die hospitaal by.
- Jy het hipertensie (hoë bloeddruk) ten minste vir die afgelope ses maande.
- Jy kan Afrikaans of Engels praat.
- Jy is bereidwillig om ingelige toestemming te teken wat die navorser toestemming gee om die onderhoud op te neem.

Wat sal van jou verwag word?

- Gesels met Jonette Potgieter en vra haar oor die navorsing.
- Voortoont 'n ingelige toestemming vorm.
- Wanneer jy die vorm voeltaal het, dan sal die navorser jou kontak om 'n datum te bepaal vir die onderhoud.
- Die onderhoud sal ongeveer 30-60 minute duur en daar sal verversingsgegee word gedurende en na afloop van die onderhoud.
- Verduidelik vir die navorser hoe wil jy terugvoer oor die navorsing kry?

Sal jy iets daaruit kry as jy aan die navorsing deelneem?

Daar is geen direkte voordele vir jou om aan hierdie navorsing deel te neem nie. Jy mag dalk iets nuuts leer oor hipertensie (hoë bloeddruk) wat jou dalk kan help om jouself te versorg.

Is daar risiko's verbonde indien jy deelneem aan die navorsing en wat sal gedoen word om dit te verhoed?

Daar mag dalk risiko's wees maar lees saam met ons wat gedoen kan word om hierdie risiko's saam te hanteer:

<table>
<thead>
<tr>
<th>Jy mag dalk moeg raak en selfs verveel raak.</th>
<th>Die onderhoud sal nie langer as 'n uur duur nie, en tydens hierdie uur sal ons kyk dat jy gemaklik sit, dat daar verversings beskikbaar is en wanneer jy te moe is om verder te gesels, dan sal die onderhoud gestop word.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miskien voel dit of jy 'n hooflyne ervers en jy mag dalk dink dit is as gevolg van jou hipertensie (hoë bloeddruk).</td>
<td>Ons sal saam met jou terugstap na die kliniek en vra dat die suster jou bloeddruk neem en jou verwys na die dokter.</td>
</tr>
<tr>
<td>Dit kan moontlik wees dat jy emosioneel begin raak as jy met ons begin gesels, asof jy wil begin huil of harteer voel en hierdie mag dalk alles gevoelens wees wat jy nie wil ervaar nie.</td>
<td>Onthou dat ons met jou wil gesels oor jou hipertensie (hoë bloeddruk) en nie oor jou persoonlike lewe nie. Ons sal nie persoonlike tipe vrae vra wat jou kan ontstel nie. Maar sou jy emosioneel voel, sal ons die onderhoud stop en jou verwys na die hospitaal vir gratis berading.</td>
</tr>
<tr>
<td>Daal wil jy nie eintlik met ons praat nie, maar jy het ervers dat ons jou druk om deel te neem.</td>
<td>Al het jy die vorms onderteken en jy wil nie verder met ons praat nie, dan stop ons die onderhoud sonder dat jy voel jy word benadeel.</td>
</tr>
<tr>
<td>Dit is alreeds baie tyd net om hospitaal toe om kom. Nou vra ons jou om ook met ons.</td>
<td>Ons wil graag met jou gesels wanneer jy in elkegeval in die tou sit en wag by die kliniek. Daarom sal ons met jou 'n afspraak maak wat jou pas, op diezelfde dag wat jy kom om jou medisyne by die hospitaal te kom haal.</td>
</tr>
</tbody>
</table>

HREC General WICF Version July 2016
te praat en dat die onderhoud nou nog meer van jou tyd gebruik.

| Jy mag daal bang voel dat mense sien dat jy met ons praat oor jou hipertensie (hoë bloeddruk). | Ons sal met jou gesels in 'n gemaklike en privaat kantoor, maar ons kan nie help as iemand sien dat jy na ons kantore toe stap om te gesels nie. Ons sal ook nie help as die medis-pasiënte by die kliniek wat sit en wag, sien dat jy met ons gesels nie. Daarom sal diegene wat in die tou sit en wag uitgenooi word om in 'n private kantoor te kom gesels en gedurende hierdie gesprek sal dit net jy en die navorsers wees. Sodra jy klaar is met die onderhoud, dan gaan wees jy weer jou plek in by die kliniek. Ons sal ook seker maak dat daar niemand blyf die kantoor sit en wag nie, daarom sal niemand eintlik weet wie in die kantoor ingaan nie. Verder sal die inligting na die onderhoud nie verder aan jou naam gekoppel kan word nie. Jou naam sal met 'n kode vervang word en al die inligting sal verwerk word in 'n groot poel, dus sal niemand kan terugverwys na wat jy spesifiek gesê het nie. |

Hoe gaan ons jou konfidensialiteit beskerm en wie gaan die bevindinge sien?

- Niemand sal jou naam kan verbind met die onderhoud nie.
- Jou privaatheid sal gerespekteer word. Daarom sal geen persoonlike details voorsien word nie. Net die navorsers en jy sal weet van die inligting. Elke onderhoud sal 'n kode kry en slegs die navorsers sal weet watter onderhoud pas by watter deelnemer.
- Al jy inligting sal konfidentsieel gehou word deurdat al die onderhoudse gekodeer word nadat dit getranskripsie is. Slegs die transkripsies sal niemand kan sien watter inligting is voornam deur watter deelnemer nie.
- Slegs die navorsers sal na die bevindinge kyk. Daarbenewens sal die database, nadat die data (inligting van al die onderhoud) geveilig gemaak is (alle identifiseerbaar inligting word uitgelaat) beskikbaar wees aan ander navorsers wat die inligting wil gebruik.
- Toestemming sal slegs aan die navorsers gegee word indien hulle skriftelik aansoek doen by die GNEK van die NWU alle etiese procedures volg wat deur die etiese komitee gespesifiseer word.
- Bevindinge sal veilig bewaar word deur die harde kopieë in kaste in die navorsing se kantoor toe te sluit en vir elektroniese data sal dit wagwoordbeskerm word. Sodra die data (inligting van die onderhoudse) getranskripsie is sal dit afgegee word van die opnemers en 'n anonyme database sal behou word vir ander navorsers. Data sal vir 6 jaar geslaat word waarne alle data vernietig sal word, elektroniese en harde kopieë.

Wat gebeur met die bevindinge?

Die bevindinge van die navorsing sal gebruik word vir hierdie navorsing en vir toekomstige studies wat inligting mag vereis met betrekking tot pasiënte met hipertensie (hoë bloeddruk) in 'n publieke gesondheidsstelsel. Dit moet egter verstaan word dat wie ek al die gebruik van die inligting aanvaar dit sal doen deur GNEK en ten volle sal moet voldoen aan hierdie komitee se vereistes vir die gebruik van die data.

Hoe sal ek inligting bekom oor die resultate van die navorsing?

Wanneer die navorsing afgehandel is, sal ons vir jou 'n brosjure gee wat die resultate vertoont.

Gaan jy betaal word om aan die studie deel te neem en is daar enige kostes vir jou?

Jy sal nie betaal word om met die navorsing te praat nie. Omdat jy alredes by die kliniek sou wees, is daar nie vergoeding vir verworven kostes nie. Daar sal verwagting gegee word as h een gebaar om dankie te sê vir jou deelname.

Is daar enige iets anders wat jy moet weet of doen?

- Jy kan my (Dr Lynn Preston) kontak by 083 252 7763 indien jy enige verdere vrae het of probleme ondervind. Alternatiewelik kan jy my studieleier (Prof Petra Bester) kontak by 082 298 3367.
- Jy kan ook die Gesondheidsnavorsingsetekkomitee via Mev. Carolien van Zyl kontak by 018 299 1206 of carolien.vanzyl@nwu.ac.za indien jy enige navrae of bekommerisse het wat nie oor die navorsing beantwoord is nie of indien jy enige klagtes oor die navorsing het.
- Jy sal 'n kopie van die inligting en toestemmingsvorm vir jou eie doeleindes ontvang.
Verklaring deur deelnemer

Deur hierdie vorm te onderteken, stem ek ................................................................. in om deel te neem aan die nevoring getiteld:

Bemagtig van pasiënte met hipertensie in 'n publieke gesondheidsorg stelsel na verhoogde selfsorg deur middel van psigo-opvoeding

Ek verklar dat:

- Ek die inligting gelees het/dit aan my verduidelik is deur 'n betroubare persoon in n taal waarin ek vlot is en gemaklik voel en dat die onderhoude opgeneem kan word.
- Die navorsing duidelik aan my verduidelik is.
- Ek die kans gegend is om vrae te vra aan beide die persoon wat die toestemming van my verfky het, asook die navorser en al my vrae is beantwoord.
- Ek verstaan dat daelname aan hierdie studie vrywillig is en ek is nie gedruk om deel te neem nie.
- Ek mag kies om die studie enige tyd te verlaat en sal nie op n negatiewa manier hanteer word as ek dit doen nie.
- Ek gevra mag word om die studie te verlaat voordat dit afgehandel is, as die navorser voel dat dit in die beste belang is, of indien ek nie die studieplan volg waarop gereegkoms is nie.

Geteken te (plek) .............................................. op (datum) .................................. 20...

Handtekening van deelnemer Handtekening van getuie

Verklaring deur die persoon wat toestemming verkry

Ek (naam) ............................................................. verklar dat:

- Ek duidelik en in detail die inligting in die dokument aan .................................................... verduidelik het.
- Ek het nie n tolk gebruik nie.
- Ek het hom/haar aangemoedig om vrae te vra en het genoegsame tyd spandeer om dit te antwoord.
- Ek is tevrede dat hy/haar van die navorser genoegsaam verstaan, soos bo bespreek
- Ek het hom/haar tyd gegun om dit met ander te bespreek indien hy/haar dit sou wou doen.

Geteken te (plek) .............................................. op (datum) .................................. 20...

Handtekening van persoon wat toestemming verkry Handtekening van getuie
Verklaring deur navorser

Ek, Lynn Preston, verklaar dat:

- Ek die inligting in die dokument vir Suster Jonette Potgieter (mediator by die MBPO hipertensiekliniek by Potchefstroom Hospitaal) gegee het, wat ten volle ingelig was rakende die proses wat gevolg gaan word in die navorsingstudie.
- Ek het nie’n tolk gebruik nie.
- Ek het haar aangemoedig om vrae te vra en het genoeg tyd geneem om dit te antwoord en was ook beskikbaar sou sy enige verdere vrae wou vra.
- Die ingeligte toestemming was verkry deur ’n onafhanklike persoon Suster Potgieter.
- Ek is tevrede dat sy alle aspekte van die navorsing genoegsaam verstaan, soos bo beskryf.
- Ek is tevrede dat sy tyd gehad het om dit met ander te bespreek indien sy dit sou wou doen.

Getekene te (plek) ....................................... op (datum) .................................. 20....

Handtekening van navorser Handtekening van getuie
ADDENDUM 9: DECLARATION OF LANGUAGE EDITING

To whom it may concern

DECLARATION OF LANGUAGE EDITING

Re:  Empowering patients with hypertension in a public health system towards enhanced self-care through psycho-education

This serves to confirm that I, Tanya-Lee Ruby Stewart, undertook the language editing of the above-mentioned document for LD Preston, student number 10521402, for the purpose of submission as a Master’s dissertation. Technical editing and referencing were done by Mrs Belind Cuthbert. Changes were suggested in track changes and per email. Implementation was left up to the author.

Should you have any queries please contact me on 084 556 7745.

Yours sincerely

TR Stewart
Member: South African Translators’ Institute
SATI registration no: 1003470

15 November 2018
ADDENDUM 10: TURNITIN DIGITAL RECEIPT

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Empowering patients with hypertension
in a public health system towards
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education

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Research proposal for the dissertation entitled in partial
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Health Promotion/Dietetics

Department of Health Promotion
Pennsylvania State University

Supervisor:
Kathleen Preston
PhD, RD, LCPD

Assistant supervisor:
Patricia Perry
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