

**BRAIN DRAIN OR BRAIN GAIN OF ALLIED
HEALTH PROFESSIONALS IN LIMPOPO**

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RESEARCH REPORT

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DECLARATION

I declare that the research report, "Brain Drain of Brain Gain of Allied Health Professionals in Limpopo", hereby submitted to the University of Limpopo for the Master's degree in Business Administration has not previously been submitted for a degree at this or any other University, and it is my own work in design and execution and that all references contained therein have been duly acknowledged.

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- Appendix D Questionnaire used as research tool to collect data

RELEVANT TERMINOLOGY

Brain Drain – the migration of highly skilled professionals from an area where their skills are in demand.

Medical caregivers – mainly professionals involved in medical care, such as doctors, nurses and pharmacists

Allied health professionals – other health professionals apart from the medical caregivers who are also involved with the identification, evaluation and treatment of health problems, to contribute to total health and maximum recovery and independence.

Urban – more densely populated area with advanced infrastructure and access to resources

Non-urban/rural – sparsely populated area over large geographical areas with limited infrastructure and access to resources

Speech, Language, Audiology and Pathology Therapists – previously speech and hearing therapists, because of the scope of practice and scope of qualifications that changed the collective name was changed. For the purpose of this study, reference to Speech and Language therapists will include any professional, covered by the collective name.

ACRONYMS

AHP	- Allied Health Professionals
ANC	- African National Congress
AUS	- Australia
CEO	- Chief executive officer
DENOSA	- Democratic Nursing Association of South Africa
DRC	- Democratic Republic of the Congo
DT	- Dieticians
DUT	- Durban University of Technology
GEAR	- Growth Employment and Redistribution
GGT UDRH	- Greater Green Triangle University Department of Rural Health
HPCSA	- Health Professions Council of South Africa
HRH	- Human Resources in Health
INDS	- Integrated National Disability Strategy
KZN	- Kwa-Zulu Natal
Medunsa	- Medical University of South Africa
N	- Population
n	- sample population
NT	- Northern Territory
OT	- Occupational Therapists
PHC	- Primary Health Care
PT	- Physiotherapists
RDP	- Reconstruction and Development Plan
SA	- South Africa
SABC	- South African Broadcasting Corporation
S & L	- Speech, Language, Audiology and Pathology Therapists
TUT	- Tswane University of Technology
Unin	- University of Limpopo
US	- United States
USA	- United States of America
UWC	- University of Western Cape

- WHO - World Health Organisation
- Wits - University of the Witwatersrand
- XR - Radiographers

EXECUTIVE SUMMARY

The term “brain drain” became a reality in South Africa after doors opened for South Africans in overseas markets and the emphasis moved from hospital bed based care to total health for all South Africans. The lack of services in rural areas seems a problem with focus on migration of health professionals between rural and urban areas, and even overseas markets, leaving a possible imbalance.

More allied health professionals from previously disadvantaged groups are trained but the need in specifically the rural areas continues to rise.

Recruitment and retention strategies were implemented for scarce skilled health professionals in the Public Service but no proof is available whether it is successful or not for the allied health professional group. The vacancy rates for allied health professional posts are reportedly too high despite the fact that more candidates are recruited from rural areas to be trained as professionals, hoping they will return to work in rural areas. Allied health professionals seem to be constantly on the move despite the strategies already implemented, reasons for this are unknown.

The purpose of this study is to explore and determine if there is an imbalance of allied health workers in rural and urban areas within Limpopo Province.

Secondly, it was to determine what factors may influence and contribute to allied health professional’s decision to consider migration and thirdly to establish if the current recruitment and retention strategies are having the desired outcome.

A survey was conducted over a period of three months with respondents representing the dietetic, physiotherapy, radiography, occupational therapy and speech and language therapy professions.

The sample population was randomly selected as well as cluster sampling from the different districts within the Limpopo Province. Data was collected from a total of 122 respondents.

Because the type of data collected was mainly nominal data, graphical and tabular descriptive techniques like frequencies, relative frequencies, tables and graphs were used to provide information. Numerical descriptive techniques were also used to calculate sample statistics and the only statistical technique that involves nominal data, the Chi-Squared Test was also applied.

The findings of the research survey enabled the researcher to make final conclusions as well as specific recommendations to the target groups that may benefit from this study in order to change the “brain drain” to a “brain gain” situation for allied health professionals within the Limpopo Province.

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CHAPTER ONE

BACKGROUND AND PROBLEM STATEMENT

1.1 INTRODUCTION

After 1994, South Africa moved into a new era, active participation in global affairs were welcomed again, as opposed to the geographic limitations of the previous political dispensation. Suddenly doors were opening for South Africans in overseas and foreign countries which were not accessible previously. The term “brain drain” became a reality in South Africa. Democracy brought freedom and equality with more opportunities for education and career advancement for all groups. More people started to migrate from rural areas to urban areas in search of these opportunities and to access training facilities.

South Africa (SA) is divided into nine provinces, of which one was targeted for this study, namely Limpopo Province. Limpopo has the fourth largest population in SA and is situated in the northernmost part of SA. This province borders the Gauteng Province, which is the most urban province with the largest concentration of people and the most economic activity in SA.

Table 1. Percentage urban/non-urban population distribution by province (1996 census)

Province	Limpopo	Gauteng
Urban %	11	97
Non-urban %	89	3

Source: Limpopo Department of Health and Social Development. Annual Report (2005/2006 FY): 10

Limpopo Province has the highest rural profile of all the provinces in South Africa.

The multi-disciplinary and interdisciplinary approaches in health care are familiar to all health professionals and are canvassed as the ideal situations in which to provide health services. These approaches encourage and promote teamwork in the treatment of clients (patients) in all spheres of life and increase the possibility of optimal health and maximum recovery and independence. In health services, the medical caregivers and the allied health professionals are primarily responsible for providing this multi- or interdisciplinary teamwork. The multi- and interdisciplinary team approaches ensure a holistic approach, with total health as a common goal. Although these approaches are promulgated, no report is available to indicate the effect on total health care and the quality of service delivery if all members or role players in such a team are not present. If a total health care approach is followed in South Africa, little or no mention is made of other health professionals in this team except for doctors, nurses and sometimes pharmacists.

Reports in the media, from the National Department of Health as well as the Health Professions Council South Africa (HPCSA) indicate that Health Professionals are leaving South Africa and migration also takes place from the rural to urban areas.

For example as indicated by Piliso (2007:3) in his article in the *Sunday Times*

“Health *Professionals leave SA in droves* – More than 23 000 South African medical professionals are working in hospitals abroad. The Government’s Human Resource Health Plan, which aims to help curb the increasing migration of doctors, states that the nurses and doctors are being lured to Australia, Canada, New Zealand, Britain and the US.”

This creates a situation of imbalance and unequal distribution, and in effect must have an impact on the multi- or interdisciplinary team approaches.

These reports mainly focus on medical practitioners and nurses, but no attention is given to allied health professionals who are also regarded as health professionals with scarce skills and play a vital role in the multi-disciplinary team.

According to the criteria set by the HPCSA, the following allied health professions are also listed amongst scarce-skilled health professions:

- Radiographers
- Occupational therapists
- Physiotherapists
- Speech, language audiology and pathology therapists
- Dieticians

Even though the definition of allied health is much broader, for the purpose of this study, the focus group will be referred to as the allied health professionals as listed above.

The research question arises whether these allied health professionals working within Public Health Institutions in Limpopo, are migrating between rural and urban areas, as well as leave the province to migrate to other provinces within the borders of South Africa and, if so, are the reasons similar or specific to each professional group? A subsequent, logical question, which will not be examined in this study, is whether allied health professionals are lost to their professions or South Africa, and what are the reasons therefore?

1.2 PROBLEM STATEMENT AND DELIMITATION OF STUDY

The problem that was investigated in this study was to find out if migration of allied health professionals is contributing to an imbalance and unequal distribution of health care services in rural and urban areas in the Limpopo Province. The study also aimed to determine if migration of allied health professionals mainly takes place within SA between provinces or if global recruitment also plays a role. Furthermore, this study aimed to determine possible reasons linked to such a problem and if the reasons are similar or different in the different professions of the target group.

No or very little information is available on the current state of affairs within SA concerning allied health professionals. Several recruitment and retention

strategies have already been implemented to retain scarce-skilled health professionals, but until now, no previous research results have been published to indicate the effectiveness thereof for allied health professionals specifically.

All allied health professionals are first line practitioners and render essential services during the preventative, curative and rehabilitative interventions that contribute to total health. Furthermore, untested findings through observations and comments from qualified colleagues and undergraduate students served to convince the researcher to investigate the possible reasons, which may contribute to the difficulty of recruiting allied health professionals and whether or not the reasons or comments are unfounded.

In addition the researcher personally experienced the difficulty of recruiting allied health professionals to a rural area, without knowing the possible reasons that may contribute to the problem. This unanswered question also served to convince the researcher of the need to conduct a study in order to provide answers and evidence that can be applied to take the correct proactive decisions on a managerial level.

1.3 OBJECTIVES

- i) To determine if migration contribute to a possible imbalance and unequal distribution of the focus group between rural and urban areas.
- ii) To determine possible reasons why the focus group health professionals working in rural areas will or will not consider migrating to urban areas.
- iii) To determine possible reasons why the focus group health professionals working in urban areas will or will not consider migrating to rural areas.
- iv) To determine if reasons for migration are related to any of the following;
 - Management structures
 - Career development and upward mobility
 - Remuneration and retention incentives
 - Physical working conditions e.g. distances and accommodation
 - Tertiary training, e.g. exposure to rural practical work and recruitment of potential students.
 - Any other important reasons not listed but identified during the research.

1.4 RESEARCH QUESTION

What are the possible reasons for allied health professionals from the target group in Limpopo Province to migrate between rural and urban areas and other Provinces?

1.5 ASSUMPTIONS

For the purpose of this research study, the researcher will assume the following:

- All allied health professionals in Limpopo Province receive the full benefit of scarce-skills allowances as determined by the National Department of Health.
- All allied health professionals qualify for accommodation as specified in the Provincial Housing Policy.
- All allied health professional posts and post requirements are the same;
 - Level 6 – junior (entry level)
 - Level 7 – senior (3 years experience)
 - Level 8 – chief/principal (5 years' experience)
 - Level 9 – deputy manager (6 years or more experience)
- The following tertiary institutions are the main feeding sources of professionals to the Limpopo Province: Medunsa, Wits, University of Limpopo and University of Pretoria.
- All allied health professional students are subject to a rural practical training and thus exposed to rural areas before they qualify and assume a one-year community service.
- All allied health professionals, except radiography services are subject to community outreach programmes to improve service delivery at Primary Health Care (PHC) level.

1.6 PROPOSITIONS AND HYPOTHESIS

Descriptive hypothesis

Dieticians, physiotherapists, radiographers, occupational therapists and speech and language therapists within the allied health professional group in Limpopo, migrate between rural and urban areas and other Provinces within the borders of SA for the same reasons.

Propositions

- Allied health professional's home language influences their preference to work in rural areas.
- Upward mobility or "career pathing" influences allied health professional's decision to migrate between rural and urban areas
- Management structures influence allied health professional's decision to migrate.
- Allied health professionals younger than 25 years of age prefer to work in urban areas.
- Remuneration influence allied health professional's decision to migrate.

1.7 ETHICAL CONSIDERATIONS

All ethical principles and considerations regarding the preparation, execution and reporting of a research study were adhered to by the researcher at all times. This included the norms and standards and set guidelines by the University of Limpopo and the expected confidentiality of a study conducted in order to partially fulfil the requirements to qualify for the degree of Master's in Business Management. This implicates the non-disclosure of any information regarding this research study unless it is with the consent of the University of Limpopo.

Assurance was also given to participants in the research survey that all information given by them will be treated with the utmost level of

confidentiality and that no identity of any individual who participated in the survey will be made known to any other person by the researcher.

The researcher also made it clear to all participants in the research survey that no one is under any obligation to participate in the research survey and participation take place on a strictly voluntary basis.

Professional ethics will be adhered to by the researcher at all times as set by different professional boards under the auspices of the Health Professions Council of South Africa.

The integrity of the researcher was at all times of such a nature as to address the research problem only and not to intentionally harm or disfigure any specific profession or structure in the Department of Health and Social Development in Limpopo Province.

1.8 CONCLUSION

This first chapter focused on the presentation and introduction of the research problem to the reader, including the research question and specific objectives as well as the scope, significance and limitations of this study.

Very little to no proof or concern exists that allied health professionals in South Africa are affected by the so called “brain drain” of health workers of South Africa as reported or the effect on the holistic approach to total health care. Although allied health professionals are regarded as scarce-skilled health professionals, no proof is available to indicate that the already-implemented recruitment and retention strategies for scarce-skilled health professionals are effective or rather if other factors lead to the exodus of allied health professionals from the Limpopo Province. A clearly identified need exists to determine the possible causes of migration of allied health professionals and the reasons for the difficulty in attracting allied health professionals to the Limpopo Province, which has the largest rural population in South Africa,

The next chapter will focus on the literature and legislation involved around the ‘brain drain or brain gain’ of allied health professionals.

CHAPTER TWO

LITERATURE OVERVIEW AND LEGISLATIVE FRAMEWORK

2.1 INTRODUCTION

2.1.1 Governing influences on balance and equitable distribution of health personnel

A health profession 'Brain Drain' has become a reality in South Africa. During a dialogue between the United States and Africa countries in May 2007, Prof. Odhaimbo (2007), based at Rice University in the United States, defined the frequently used term 'brain drain' as follows: "the movement of high level experts from developing countries to industrialized nations" The 'brain drain' can also be mentioned in the same context with migration and specifically internal migration. Past and present factors exist in South Africa that may contribute to a situation like this.

Under the previous political dispensation, the health care system was guided by acts and policies to promote and maintain racial segregation and discrimination in the health care sector. "Teamwork has not been emphasised, and the doctor has played a dominant role within the hierarchy. There has been little or no emphasis on health and its achievements and maintenance, but there has been great emphasis on medical care." (ANC Health Plan 1994:7).

Since 1994, the newly instated government has brought about changes to address problems inherited from the pre-1994 era. At the same time, South Africa was welcomed once again to participate in global affairs, including economic and health affairs. This progress to global participation and joining the World Health Organisation (WHO) opened doors for South Africans to explore opportunities beyond the borders of South Africa and to gain international experience. The Human Resources for Health (HRH) strategic plan indicates the urge for young people specifically from rural communities to

experience urban life as well as international travel and employment. (Human Resources for Health Strategic Plan. Chapter 2. 2005:15)

Although there is a positive growth in the South African economy, Haydam (2004:7) posits that human capital is one of the production factors in an economy that is essential for production and ultimately economic growth. If the health system in South Africa does not have adequate human capital, productivity and service delivery cannot satisfy the unlimited needs of the South African society. The health brain drain cannot be linked to globalisation only; there seems to be a continuous loss of skilled professionals from South Africa's rural areas and a problem exists to attract highly skilled people to deliver services within the rural areas, due to migration.

2.2 LITERATURE OVERVIEW

2.2.1 Addressing the Problem

Health is a human right matter according to the South African Constitution as captured in Chapter 2 nr 27 in the Bill of Rights. In order for the National Department of Health to satisfy the needs of the people in this country, they came up with a draft strategic plan for Human Resources in Health (HRH) to assist the department in providing a human resource pool for staffing of the public sector. This plan also supports other strategies that were put in place to address changes that were promulgated in the White Paper on Health in 1997. One of the changes that were introduced in Chapter 4.1.3 to address the human capital is that,

“Health personnel should be distributed throughout the country in an equitable manner.”(South Africa 1997:11)

National and provincial health departments have implemented these strategies, as quoted in a research report by Kotzee and Couper (2006:3) “Successful strategies to increase the number of doctors willing to work in rural areas include the selection of more rural background medical students, providing positive training opportunities in rural areas during medical training,

providing bursary schemes, and bringing specialist services to rural communities. Improving the salaries of rural doctors, but how health workers respond to different reimbursement structures is largely unknown.”

These strategies are applicable to all scarce-skilled health professionals, although Kotzee only refers to doctors. Although the criteria set by the Department of Health is not available for perusal, the following professions are generally known to fall within the group of scarce-skilled health professions: medical practitioners, dentists, dental therapists, pharmacists, psychologists, dieticians, occupational therapists, physiotherapists, speech, language, audiology and pathology therapists and radiographers.

Ntuli (2007:30) reported in the media, “Vacancies in the public sector advertised in the Business Times Careers section have seen incredible growth between January and March this year, according to the DMA Index. Healthcare workers accounted for the majority of all public sector vacancies with 2 310 positions and the health department placed the most advertisements; 1 614 adverts.” (Ntuli D. Sunday Times, 29 April 2007:30)

2.2.2 Continuous outflow of Scarce Skilled Health Professionals

In March 2005, the Democratic Nursing Organisation of South Africa (DENOSA) said, “the number of nurses leaving the country in pursuit of better salaries has further increased”. The reasons for their leaving are reported to be because of salaries and poor working conditions. (SABC News. March 31, 2005)

Piliso (2007:3) also reports that health professionals leave South Africa in droves. The reporter says, “the government’s Human Resources Health Plan, which aims to help curb the increasing migration of doctors, states that the nurses and doctors are being lured to Australia, Canada, New Zealand, Britain and the US.” (Piliso S. 25 Feb. 2007. Sunday Times: 3)

In this news article, and others like it, only doctors and nurses are mentioned as leaving South Africa. This makes the reader wonder what the situation is with the other scarce-skilled health professionals that form part of a multi-disciplinary team.

The media are also compounding the matter by promoting opportunities for South African health professionals to access jobs abroad. Advertisements appear almost weekly in newspapers in which South African health professionals are lured to work abroad. These advertisements usually target doctors, nurses, physiotherapists, occupational therapists, radiographers and speech and language therapists.

Some of these retaining strategies of scarce-skilled health professionals in SA have been implemented as far back as 1996 and 2002 but reports and feedback indicate health professionals are still leaving South Africa. They do, however, mostly only mention the movement of doctors, nurses and pharmacists and no attention is paid to the other health professionals who are also members of the multi-disciplinary team and regarded as scarce-skilled health professionals.

2.2.3 External Migration vs. Internal Migration

Most of the concerns are raised about the 'brain drain' or migration to other countries and the equitable distribution of health care workers are emphasised. Recruitment and retention come to mind, but the impact of internal migration is still unknown. Collinson, Kok and Garenne (Stats SA 2006:6) define migration as, "people changing residence, leading to population redistribution". They also make it clear that internal migration is the movement within a country's borders. In their study the framework addresses the question "which places are growing due to migration in South Africa: are rural areas depopulating due to migration: and, what is happening due to labour migration?" From their study, the following conclusions are drawn: "the metropolitan are growing from migration, but not all the growth is permanent. This study places these current trends in settlement and mobility trends in the social, political and economical context of apartheid's demise." (Collinson, Kok & Garenne. 2006:16)

Kotzee and Couper conducted a study in 2006 with the aim of identifying interventions proposed by doctors in the rural Limpopo Province of South

Africa and to develop recommendations based on those proposals. They utilized a descriptive, qualitative design, using a semi-structured questionnaire. Ten doctors from rural hospitals within all six districts in the province were randomly selected and interviewed. In the view of the researcher, 10 doctors are not a representative number to draw any significant conclusions. This opinion is based on the fact that there were 42 Hospitals in Limpopo during the time of their research. The interventions identified seem to be mainly improved salaries and rural allowances, improved housing accommodation facilities, ensured career progression (referring to more senior posts) and strengthening hospital management.

Although the study focuses on doctors only, the recommendations seem to be in line with existing recruitment and retention strategies already implemented, but the quality and quantities of incentives need to be looked at.

2.2.4 Demographics in South Africa

To have a holistic view of possible reasons for internal migration within South Africa, more information is needed about the total population and the rural and urban distribution within the different provinces.

Map1: The outline of South Africa



Source: www.anc.org.za

Table 2: Population by province for the census years 1996 and 2001:

Province	1996	2001
Eastern Cape	6 302 525	6 436 763
Free State	2 633 504	2 706 775
Gauteng	7 348 423	8 837 178
Kwa-Zulu Natal	8 417 021	9 426 017
Limpopo	4 929 368	5 273 642
Mpumalanga	2 800 711	3 122 990
Northern Cape	840 321	822 727
North West	3 354 825	3 669 349
Western Cape	3 956 875	4 524 335
South Africa	40 583 573	44 819 778

Source: www.statssa.gov.za

In the Census 2001 discussion paper (Report no. 03-02-20), investigation into appropriate definitions for rural and urban areas in South Africa, the following extraction of information provides a clearer indication of the distribution of total population between rural and urban areas. The extraction includes only Limpopo as having direct bearing on the study and North West Province as a reference to a bordering province with a high rural profile. Gauteng is included mainly as a reference because of the shared border with Limpopo Province and the fact that Gauteng is the economic hub of South Africa, and for Gauteng's urban profile.

Table 3: Proportion of urban and rural dwellers by province 1996 compared to 2001.

Province	Original classification 1996 -%	1996 re-classified to 2001- %	2001 %
North West – urban	34,9	43,5	41,8
Rural	65,1	56,5	58,2
Total	100	100	100
Limpopo – urban	11	11,5	13,5
Rural	89	88,5	86,5
Total	100	100	100
Gauteng – urban	97	97	97,2
Rural	3	3	2,8
Total	100	100	100
South Africa – urban	53,7	55,1	57,5
Rural	46,3	44,9	42,5
Total	100	100	100

Source: Census 2001. Extraction from Table 3.1-1: 16. “Investigation into appropriate definitions of urban and rural areas in South Africa.”

Because of the scope of practice of allied health professionals, specifically those employed in the public service, one also needs to look at the number of people with disabilities in South Africa. The scope of practice of most of these professionals does not only focus on bed-based institutions, but also involves primary health care and rehabilitative health care to disabled people in the communities.

In the document *Prevalence of disability in South Africa*, (Lehohla 2005:9) the following is mentioned: “Since 1994 the government has formulated many policies to address the inequities that were embedded in the policies pursued by the apartheid regime. The policies have focused on empowering previously disadvantaged groups, including women, children and disabled persons.”

It also mentions the policies that were formulated and implemented to be the; Reconstruction and Development Programme (RDP), Growth Employment

and Redistribution (GEAR) and the Integrated National Disability Strategy (INDS).

Lehohla (2005) also mentions that the need for relevant data and information on the prevalence and experience on disability has grown increasingly as a result of a need to monitor and evaluate the impact of policies.

Table 4: Number of disabled persons by province and gender

Province	Population(N)			%Disabled persons		
	Male	Female	Total	Male	Female	Total
Western Cape	96 549	90 301	186 850	4,4	3,9	4,1
Eastern Cape	173 229	199 037	372 266	5,8	5,8	5,8
Northern Cape	23 620	23 353	46 973	5,9	5,5	5,7
Freestate	87 758	97 619	185 377	6,8	6,9	6,8
Kwa-Zulu Natal	219 685	250 903	470 588	5,0	5,0	5,0
North West	105 169	106 054	211 223	5,8	5,7	5,8
Gauteng	164 588	167 023	331 611	3,7	3,8	3,8
Mpumalanga	87 319	94 874	182 193	5,8	5,8	5,8
Limpopo	124 128	144 774	268 902	5,2	5,0	5,1
South Africa	1 082 043	1 173 939	2 155 982	5,1	5,0	5,0

Source: www.statssa.gov.za report no. 03-02-44(2001)

The report also says that “despite the limitations of the data collected in Census 2001, the findings of the report has [sic] underscored the disadvantaged position disabled persons are experiencing as far as access to basic services and employment are concerned.”

By implementing the Primary Health Care System, the South African government is trying to address the shortage of services and the unequal distribution. Health care professionals, medical care as well as allied health professionals are involved in outreach programmes in order to take the services closer to the people and improving access.

2.2.5 Total Health vs. Medical Care, which are the role players?

Coulson (1998:4) says the following about the definition of health:

“The World Health Organization (WHO) defines health as ‘a state of physical, mental and social well-being and not merely the absence of disease or infirmity’. This definition is important because it encourages a holistic understanding of health, which regards a person’s physical and emotional health as interrelated with the environment in which he or she lives, and works. This definition is also important because it regards health as something positive, an asset, rather than as an absence of ill health.

This definition emphasizes that health is not medical care only; it promotes teamwork and an intra-disciplinary and multi-disciplinary approach to health care. This definition is in line with the ANC’s National Health Plan and supports the vision thereof.

A multi-disciplinary team in the health system may comprise of any combination of the following, usually three or more professionals, and the combination will depend on the field of expertise; doctors, nurses, pharmacists, dentists, dental therapists and oral hygienist, psychologists, occupational therapists, physiotherapists, dieticians, radiographers, speech, language, audiology and pathology therapists, optometrist and social workers.

From the group mentioned, doctors, nurses and pharmacists may traditionally be regarded as medical caregivers. The other group of professionals may be regarded as the health support services.

In the United States (US), Britain, Canada, Australia and New Zealand, the health support services are collectively referred to as the Allied Health Professionals (AHP). In South Africa, however, according to the Health Professions Council South Africa (HPCSA), the concept “allied health professionals” refers to a collective description of health workers not registered with any of the 12 professional’s boards under the guardianship of the HPCSA.

Struber (2004:4) reports that the same problem of defining “allied health” is occurring in Australia.

“In Australia, variation in the inclusion/exclusion of professions under the umbrella term Allied Health may fluctuate in relation to the goal of the collaborative exercise, political expediency, the clinical setting and the source or purpose of the identification. This has led to difficulties in the perception of an identity for Allied Health at an individual, organizational and community level. Allocation of resources to assist the preparation of AHP graduates for rural and sole practice is required”.

In the National and Provincial Departments of Health, the collective term that is used to refer to the health support professionals is “allied”, commensurate with the way it is reflected on the approved staff structures for provincial and district hospitals. In Limpopo Province, various changes have been made under the overarching term “allied health professionals”, with a number of professions being added and removed at certain times for administrative purposes.

From Wikipedia, the free encyclopaedia, the allied health professions are defined as those clinical healthcare professions distinct from the medical and nursing professions. As the name implies, they are all allies in the healthcare team, working together to make the healthcare system function.

2.2.6 Promoting and Implementing a Team Approach

The training of health professionals usually promotes the application of a multi-disciplinary approach, but taking into consideration the efforts that still exist and actions that are taken to ensure this, one can not help but think that the focus of health care is professions-specific.

This approach, or the lack of it, is not characteristic to South Africa only. Stephenson and Richardson (2006) mention in the abstract of their article, that there is an increase in demand for curricula in health care to facilitate inter-professional, client-centred, evidence-based decision making by using

reflective and reflexive frameworks. They propose the use of the International Classification of Functioning, Disability and Health (ICD) as a framework. They conclude that conceptualising healthcare as the maintenance and promotion of health across the lifespan – a total health care approach - requires a change in the understanding of health. The focus should therefore shift away from intervention after the diagnosis towards enabling clients to maintain a lifelong independence within the community. By this they mean not only the absence of illness, but also the social, physical and mental well-being of the individual.

Dyer (2003) also reported that this is the point of departure at the Department of Nursing and Health Services Management, at the University of New England's College of Health Professions in Portland, Maine, in the USA. Team-taught courses that integrate students from various faculties should be considered in order to encourage teamwork within health care and prepare students for team-based services.

In South Africa, at the University of Cape Town, under the Faculty of Health Sciences, training is also offered to improve multi-disciplinary teamwork:

“Described here is the educational rationale of a multi-professional course with a difference; one that injects value to undergraduate health professional education through the development of critical cross-field knowledge, skills and attitudes that unite rather than differentiate professions.” (Duncan, Alperstein, Mayers, Olkers & Gibbs. 2006:59-63)

The aim of the course is described as follows, “to lay an integrated pan-professional foundation for the advancement of collective commitment to and understanding of national health and social development objectives such as primary health care, human rights and professionalism.” (Ibid)

However, working in teams together involves leadership and management of the team and the team dynamics. McCallin (2003) describes the evolving of interdisciplinary teamwork. The preliminary research suggests that, “interdisciplinary team leadership is a model of shared leadership that

requires more development if it is to become the cornerstone of interdisciplinary team practice in a radically reforming health sector.” (McCallin. 2003:364-370)

It is not known if an evaluation of the implementation of the multi-disciplinary approach in public hospitals in South Africa is available. The staff structures in hospitals in the Limpopo Province may be an indication of the limitations of upward mobility of allied health professionals. According to these staff structures, a medical practitioner will always be the line function manager of all other health professionals, except for nursing. (Department of Health Limpopo, Approved structure. 2003)

In the strategic plan for provincial and district hospitals, the indicators for strategic objectives are also mainly focusing on medical, nursing and pharmaceutical functions. Very few, if any, indicators for measuring performance are used to evaluate the production or service delivery of allied health professionals, including the services delivered to the community as part of implementation of the primary health care system. (Department of Health Limpopo, Strategic plan. 2006)

2.2.7 Recruitment and Retention of Allied Health Professionals

Stagnitti, Schoo, Dunbar and Reid (2006) did a qualitative research in West Victoria, Australia, in 2003 to explore the issues regarding recruitment and retention. Findings related to management and retention of staff is addressed in the report. Questionnaires were used to conduct a qualitative research.

“Results were related to Maslow’s hierarchy of needs, level of belonging, with professionals needs identified as feeling supported, orientation to the position, clear job description, and [being] able to recommend the position to others. Qualitative data showed that recommending the position was associated with job satisfaction, autonomy, flexibility, and variety of work. The immediate management structure was significantly related to retention.

Reasons given for intending to leave were related to management categories. These were management structure, lack of career structure, and lack of professional support.

Reasons given by respondents for not recommending their current position were as follows: not for long-term career, risk of deskilling if staying too long, and financially unrewarding. These reasons were also related to management.

Positive reasons for staying, which were related to management, included; flexible work conditions, variety of clinical, and management experience, good working environment, good support and autonomy. Recommendations are given for organizational development and training for managers.” (Stagnetti et al. 2006:226-232)

Schoo, Stagnitti, Mercer and Dunbar (2005) report that recruitment and retention of allied health professionals is a challenging problem in Australia and overseas and deserves attention in all domains. It is reported that the Allied health Workforce Enhancement project of the Greater Green Triangle University Department of Rural Health (GGT UDRH) is working towards increasing the number of allied health professionals in the southwest of Victoria. An interactive model is being developed that addresses recruitment and retention factors.

A report from Struber (2004:2), entitled; “Recruitment and retaining allied Health Professionals in rural Australia: Why is it so difficult?” relevant detailed information is given on the situation in rural Australia. No mention is made, however, of what research method was used or how the data was collected and interpreted. Specific information is given regarding disincentives that were identified by allied health professionals for rural practice:

- Lack of management support
- Lack or appreciation and/or recognition of their role
- Lack of professional supervision, support and/or mentoring
- Difficulties accessing professional development/ skills development
- Lack of support for ongoing/post graduate education

- Professional isolation
- Lack of career structure/progression/stability
- Lack of resources
- Income and terms of employment
- Difficulty obtaining locum cover
- Large caseloads and excessive travel
- Lack of orientation to the community
- Lack of employment and/or education opportunities for spouse and children
- Social and cultural isolation
- Personal safety fears

(Struber.2004:3)

A number of broader recommendations are made in the report regarding strategies for recruitment and retention of allied health professionals:

- Access to appropriate education courses and opportunities at undergraduate and postgraduate levels for potential and practicing rural AHP's must be enhanced
- A definition of 'Allied Health' must be developed and agreed upon by all stakeholders
- Allocation of resources to assist the preparation of AHP graduates for rural and sole practice is required.
- The key factors underlying Allied Health students' decisions to pursue a rural career need to be examined.
- AHP's should be formally represented on policy and program groups, management committee's etcetera that impact on rural health.
- Programs are required that address the issues of support and long-term retention of skilled and experienced AHP's.
- Employers must ensure that rural AHP's have access to same-discipline support, either on or off site.
- Innovative practice arrangements in rural areas need to be supported.
- Service provision models that are responsive to community needs, particularly sustainable models of outreach service, are required.

- Comprehensive data collection specific to the Allied Health workforce is imperative.

(Struber.2004: 4-7)

The conclusion of the report says, “the underlying issues do not have easy solutions and further research into the complexities of the determinants of the current rural health status is required before their implications on the employment of AHP’s can be fully understood.” (Struber 2004:8) It also stated that a full resolution of the problem might never be possible.

Battaya and McTaggard conducted research in 2003 focussing on the development of a model for sustainable delivery of outreach allied health services to the remote northwest Queensland area of Australia.

They describe how a model was developed, occurring over four stages. Firstly a planning matrix was formulated as the outcome of a workshop to identify core components. Secondly they did an external and internal environmental scan of allied health services to identify specific gaps regarding service delivery and health priorities. Thereafter they did an extensive analysis of previous researches on the recruitment and retention of allied health professionals as well as determining what is regarded as reasonable levels of service delivery. Lastly they combined all the information to develop a model for service delivery.

The report gives detailed result of which the following seem to be the most important:

“A range of strategies were developed to support the recruitment and retention of allied health professionals, including working and travelling in functional teams; orientation to remote practice; schedules that recognize the need for time back at base, and utilisation of aircraft to minimise travel time; employment packages recognizing isolated and remote practice, professional development, postgraduate study, professional and clinical mentoring; financial subsidies for housing and childcare. “ (Battye & McTaggart 2003:194)

The process described enabled the development of a Model for delivering allied health services in a remote rural area that considered the burden of disease, context for service delivery, addressing community concerns with visiting services, recruitment and retention of health professionals and integration with resident and visiting health and community services.

“The strategies employed provide a template for allied health service development in rural and remote areas internationally.” (Batteya et al 2003:194)

If the template resulting from this study could be made available to determine if it can also be applied in South Africa’s rural areas, or even just some aspects of it, it could have been more useful. The method to address the development of a model might be applicable in South Africa.

Hall, Garnett, Barnes & Stevens (2007) conducted research in the Northern Territory (NT) of Australia to understand what attracts allied health professionals to a particular place, and why they leave, as it is important for the development of effective strategies to manage turnover and maximise productivity. The study focussed on dental professionals. They used data collected during 2006 by way of surveying social and work-related factors influencing the focus group’s migration decisions.

The results of the study are summarized as follows:

- Professionals who stayed longer than 5 years were older
- They had invested in the purchase of homes
- They were more involved in social and cultural activities
- Those who; moved towards the NT as a result of financial expectations, who had strong expectations of excitement and those with novel experience stayed for less than 5 years.
- Those who left before 5 years left because they found the work environment stressful.
- Those who stayed for longer than 5 years had existing social networks and were familiar with the environment and enjoyed the lifestyle
- The conclusion made was:

- There are benefits in actively involving newly recruited professionals and their families in social networks.
- Work related stress and departure was associated with administrative deficiencies within the management system

“The Northern Territory’s unusual demographics profile, the factors influencing recruitment and retention are not markedly different from those reported elsewhere.” (Hall et al 2007:655)

Bender (2005) reported in an article, “Career ladders designed for health care practitioners are not always long enough to reach beyond the top rungs of clinical practice. Limited upward mobility can result in dissatisfaction and potential loss of experienced staff members.” (Bender 2005:364-8)

This information may be similar in South Africa, specifically Limpopo Province, as the existing staff structure in use at the Department of Health, do not necessarily provide for senior posts and career pathways stop at the level of an Allied manager.

2.3 CONCLUSION

- Very little information is available on the migration of allied health professionals within the public sector in South Africa.
- If these allied health professionals tend to migrate between rural and urban areas and other provinces, the possible reasons are unknown.
- It is not known if the recruitment and retention strategies implemented by the Provincial Department of Health, is effective in terms of retaining allied health professionals.
- South Africa's situation regarding the recruitment and retention of allied health professionals may be very similar to other countries with remote rural areas.

The following chapter will deal with the design and methodology of the study

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The researcher applied the eight different descriptors as identified by Cooper and Schindler (2006:139) selecting the design for the purpose of this research.

For this research, the researcher used a causal approach wherein, “the roots or causes of a problem or a specific occurrence is sought” Huysamen (1993) as quoted by Alberts (2007:2). The researcher also applied the quantitative research approach, described by Cooper and Schindler as “the precise count of some behaviour, knowledge, opinion or attitude”. (Cooper. 2006:716). A formal survey study was undertaken that was preceded with a research question and a hypothesis that should be tested and propositions proven after strategic questions are developed, since no existing instrument is available and applicable for this research project.

The method applied in the research was to first conduct a literature overview on existing information, secondly an empirical study was done, thirdly non-parametric analysing techniques of the data were applied and lastly conclusions and recommendations on the results of the study were given.

Target groups that can benefit from the results of this research study are;

- Provincial Department of Health, Limpopo Province, to assist with informed decision-making processes.
- Health professionals working within the province
- Educators – Tertiary-training facilities of the focus group. To enable them to, evaluate their curricula in terms of the effect of exposure to practical trainings in rural areas.
- Primary Health Care, to assist with, recruitment and retention strategies and the total health care approach.

- District health authorities, to assist with recruitment and retention strategies and the total health care approach.
- Heads of Institutions within the province

The target population consisted of allied health professionals as described within the focus group before. The sample consisted of public servants only, employed by the Department of Health in the Limpopo Province. Permission from the Provincial Department has been obtained before the survey started.

(See Appendix B)

3.2 INVESTIGATIVE QUESTIONS

Descriptive hypothesis

Allied health professionals in Limpopo Province migrate from rural to urban areas and other Provinces within the borders of SA for the same reasons.

Propositions

- Home language influences allied health professional's preference to work in rural areas.
- Upward mobility or "career pathing" influence allied health professional's decision to migrate between rural and urban areas
- Management structures influence allied health professional's decision to migrate
- Allied health professionals younger than 25 years of age prefer to work in urban areas.
- Remuneration influence allied health professional's decision to migrate.

3.3 METHOD OF DATA COLLECTION

The method of data collection was communicative during a formal survey. The researcher collected data through questioning the participants by way of a self-administered questionnaire in a group situation.

Because there is no existing data collection tool available, the researcher developed a questionnaire. The questionnaire consisted out of 38 questions, also referred to in the analysis as items. The first part of the questionnaire consisted of bio- and demographic questions. The biographic questions are very important to the researcher to proof some of the propositions to be true or not. Thereafter specific questions were developed in such a way for the researcher to obtain the most useful information in order to test the hypothesis and further proof propositions.

Most of the questions in the questionnaire were developed to be dichotomous, questions with only two possible responses such as "yes" and "no". Open

ended questions were limited to only explanations or reasons why a participant decided to indicate “yes” or “no”.

The questionnaire was kept as short as possible to encourage participants to complete it as most people are unwilling to spend too much time on completing questionnaires and the time slot allowed during the provincial profession specific forums was limited.

In the Department of Health, Limpopo Province, allied health profession-specific forums take place every quarter. These forums were used as an opportunity to meet the different categories of professionals in a group situation where the researcher presented and distributed the questionnaire and participants handed the questionnaires back again. This situation reduced the loss of replies compared to the process where questionnaires were to be mailed or posted to the target group. A 100% response rate was obtained; all participants in the sample completed and submitted questionnaires.

The nominal and ordinal scales of measurement were used during the collection of data.

All respondents were employees of the Department of Health, Limpopo Province, and also belonged to one of the five professional groups, namely; dieticians, physiotherapists, radiographers, occupational therapists and speech and language therapists.

3.4 PURPOSE OF THE STUDY

The purpose of the study was to be descriptive and causal in nature, enabling the researcher to discover the relation and association between different variables and answer the research question by way of induction and deductive reasoning.

3.5 TIME DIMENSION

In terms of time dimension, the study was carried out as a cross-sectional study as it took place once during the time frame of the study.

As already described under 3.3, every allied health profession has a profession-specific forum during each quarter of the year, which is initiated and chaired by the profession-specific coordinator.

Permission was obtained to use these forums as an opportunity to collect data for the research study. (See Annexure B) The third quarter of the 2008/2009 financial year was targeted and between July and September of that year, each professional group was available for part of one day in order to distribute and return the questionnaire in order to collect the data. No questionnaires were distributed and returned outside the timeframe of the specific day per professional group.

3.6 SAMPLING DESIGN

Sampling methods implemented during this research project was random sampling and cluster or area sampling. The researcher decided on these methods to avoid any biasness and to include a representative number of professionals from each category working in rural as well as urban areas within the Limpopo Province. The sample represented all post levels of a specific profession as they were randomly send to attend the forum.

In preparation for professional forums, an invitation was send to all 40 hospitals in Limpopo province, requesting at least one professional to attend the forum.

The respondents therefore came from all the Districts in the Limpopo Province, which include: Capricorn-District, Vhembe-District, Waterberg-District, Mopani-District, Sekukuni-District and the Polokwane-Mankweng Hospital complex.

The researcher had no prior information as to who will be the representative from every hospital that will be send to attend the profession-specific forum, and whether all hospitals within the Limpopo Province would be represented.

The total population (N) of the research survey includes 62 dieticians, 65 physiotherapist, 119 radiographers (including SDR's), 80 occupational therapists and 46 speech and language therapists, all of whom are employed by the Department of Health in the Limpopo Province.

Table 5: Research population

	Dieticians	Physiotherapist	Radiographers	Occupational therapists	Speech & Language therapists
Total population in Limpopo (N)	62	65	119	80	46
Sample (n)	35	24	26	24	13
Representation	56%	37%	22%	30%	28%

3.7 THE RESEARCH ENVIRONMENT

The Department of Health in the Limpopo Province has a memorandum of understanding with Medunsa regarding the practical training of students. Therefore, the Polokwane–Mankweng Hospital Complex is regarded as the tertiary hospital in the province, as most undergraduate students from Medunsa go there for undergraduate practical training, and thus the complex does not form part of the Capricorn District but is regarded as a district on its own. Other district hospitals in the province receive final year students from Medunsa and Wits University for rural practical training, commonly referred to as “community rural block practical”.

Within each district in the province, there is one Regional Hospital, with a classification based on its size and bed capacity. Other hospitals in the district are classified as district hospitals.

The organogram/staff structures of regional and district hospitals differ in terms of span of control and line of command. A district hospital for instance, will have a chief or principal therapist (Level 8) in the specific professional department as the highest post, whereas the regional hospital will have a deputy manager (Level 9) for the specific department. This deputy manager, who is profession-specific, will also take on district responsibilities and provide specific information to the provincial profession-specific coordinators. Provincial coordinators are actually profession-specific deputy managers who have been appointed at the Polokwane–Mankweng Hospital Complex. For the reason that they are expected to coordinate profession-specific activities in the province, they report to both the Provincial Allied Health Manager, based at the Provincial Office, (who is not their line functional manager), as well as the line functional manager in the Polokwane-Mankweng Hospital Complex.

In each regional hospital in every district, an Allied Health Manager is appointed to manage eight professional departments, while district hospitals only have Allied Health Deputy Managers.

These managers report to a Clinical Manager, who must be a medical doctor, according to the post requirement. The clinical manager in turn reports to the Chief Executive Officer (CEO) of each Hospital.

The collection of data took place in structured group situations with only one professional group at a time and professionals from different post levels as described above. Respondents had the opportunity to ask for clarity if they did not understand any of the questions clearly without getting any guidance in terms of their responses from the researcher. The research was limited to the confines of the Department of Health Limpopo Province.

3.8 DATA ANALYSIS

The researcher accepts the result of the study as reliable and unbiased. The sampling method also contributed to well-represented results in order to prove the research propositions and do hypothesis testing.

Because of the type and values of data being mostly nominal, data was not treated as ordinal or interval but only calculations based on frequencies of occurrence was appropriate.

Values are the arbitrary numbers that represent categories. The expected results are presented by using graphical and tabular descriptive techniques like frequencies, relative frequencies, tables and graphs.

Numerical descriptive techniques were also used to calculate sample statistics.

The statistical technique that involves nominal data, the Chi-Squared Test was also applied to determine whether two classifications of a population of nominal data were statistically independent or not.

3.9 CONCLUSION

This chapter dealt with the description of specific research design and methodology to conduct this empirical study, which is descriptive and causal in nature. It also described the data analysis techniques that were applied in order to analyse data as well present the data to be useful information.

CHAPTER FOUR

FINDINGS OF THE RESEARCH SURVEY

4.1 INTRODUCTION AND BACKGROUND

The focus of the previous chapter was on the methodology used to conduct this research, the development of the measuring instrument, sampling methods and the way data has been collected in the Limpopo Province.

This chapter deals specifically with the data that was collected, the statistical analysis thereof and the tabular and graphical presentation and interpretation of the data collected through the use of the questionnaire as described in the previous chapter, 3.3.

In this chapter, data from each item or groups of items from the questionnaire will be analysed and interpreted in detail, as provided by the respondents. The information will mainly be displayed in figures or tabled.

During the speech and language therapy forum, only 13 qualified therapists attended the forum. In the Department of Health, Limpopo Province, 46 qualified speech, language audiology and pathology therapists are employed in total. These therapists render services at only 27 of the 40 hospitals within Limpopo Province. During this forum, there was thus a 28% representation of the speech & language therapist population of Limpopo Province.

At the profession-specific forum for occupational therapists, only 24 of 80 qualified therapists employed by the Department of Health in the province attended the forum. Occupational therapy is rendered at all 40 hospitals within the Limpopo Province. During this forum, there was thus a 30% representation of the occupational therapist population of Limpopo Province.

During the physiotherapy profession-specific forum, 24 therapists attended the forum out of a total of 65 physiotherapists employed by the Department of Health in the province. Out of 40 hospitals in the province, the service is rendered at 35 hospitals. During this forum, there was thus a 37% representation of the physiotherapist population of Limpopo Province.

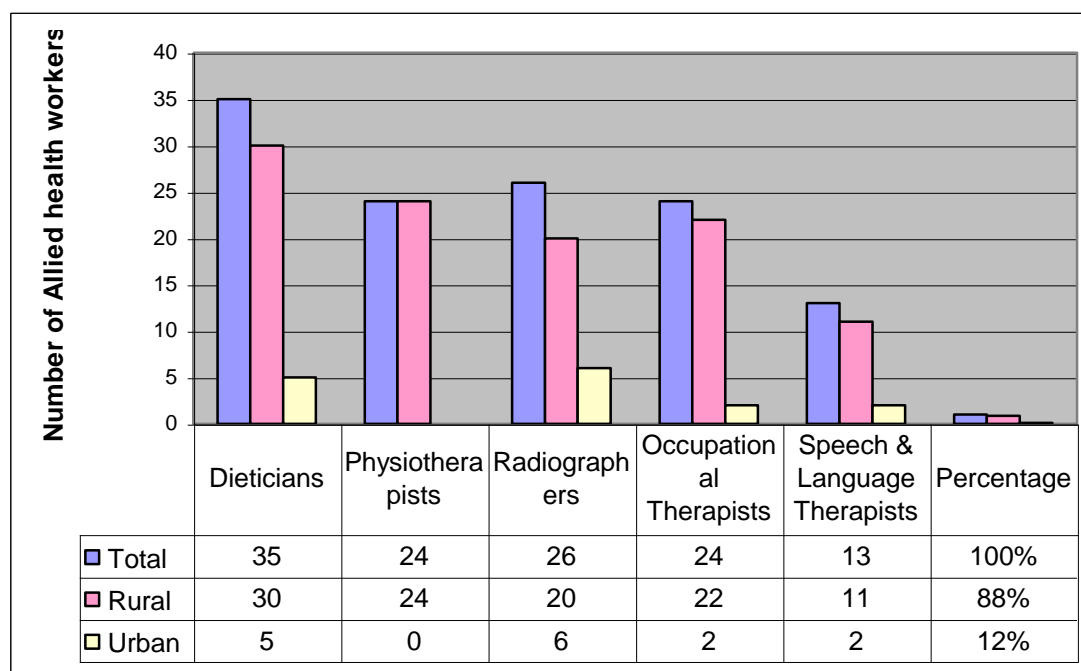
At the dietetics profession-specific forum, 35 of the total number of 62 dieticians employed by the Department of Health in the province were attending. All 40 hospitals in the province render dietetic services. During this forum, there was thus a 56% representation of the dietician population of Limpopo Province.

During the radiography profession-specific forum only 26 radiographers out of 119 radiography employees, including supplementary diagnostic radiography workers, who are not regarded as scarce-skilled health professionals, attended the forum. All hospitals in the province render radiography services. During this forum, there was thus a 22% representation of the radiographer population of Limpopo Province. For the purpose of this study, supplementary diagnostic radiography workers were not included as respondents, but only the qualified radiographers. Therefore the radiography population include supplementary diagnostic radiographers but the sample includes only qualified radiographers.

4.2 PRESENTATION OF FINDINGS

Item 1 – Urban/rural distribution of allied health professionals

Figure 1: Distribution of allied health professionals from the sample between rural and urban areas in the Limpopo Province



It is observed from the data shown in Figure 1 that 12% of all respondents in this survey are working in urban areas.

Limpopo is one of our country's most rural provinces and thus the assumptions in reports mentioned in chapter one and two, namely that an unbalanced distribution of health workers between rural and urban areas exists, is found to be untrue in the case of allied health workers. More allied health workers are working in rural areas than in urban areas.

Statistical reports indicate the relation between urban and rural population distribution in the Limpopo Province is 11%: 89% (Department of Health and Social Development 2005-2006:10), the sample population ratio distribution of allied health professionals between urban and rural areas in Limpopo is 12%: 88%. Therefore it can be assumed with certainty that there is no imbalance in the distribution of allied health professionals between rural and urban areas in Limpopo province.

This however, does not exclude the general need for more allied health professionals in Limpopo province. The World Health Organization provides a guideline to assist national governments to determine staffing norms according to the population per allied health professional. These staffing norm guidelines were not considered during this research study, therefore the distribution of allied health professionals between urban and rural areas may be in line with the population distribution in the province, but does not indicate that enough allied health professionals are appointed to fulfil the needs of the general population in the Limpopo Province.

Item 2 – Gender profile of allied health professionals

Table 6: Gender distribution of professionals between rural and urban areas

	Total	Male	Female	Percentage per profession. Urban-rural distribution
Dieticians	35	8	27	100%
▪ Urban	5	3	2	14%
▪ Rural	30	5	25	86%
Physio-therapists	24	9	15	100%
▪ Urban	0	0	0	0
▪ Rural	24	9	15	100%
Radiographers	26	17	9	100%
▪ Urban	6	3	3	23%
▪ Rural	20	14	6	77%
Occupational Therapists	24	5	19	100%
▪ Urban	2	0	2	8%
▪ Rural	22	5	17	92%
Speech & Language Therapists	13	4	9	100%
▪ Urban	2	1	1	15%
▪ Rural	11	3	8	85%

Total	122	43	79	100%
▪ Urban	15	7	8	12%
▪ Rural	107	36	71	88%
Percentage of sample	100%	35%	65%	
▪ Urban	12%	6%	7%	
▪ Rural	88%	29%	58%	

When doing an analysis of Item 2 in Table 6, it is clear that all professions are female dominant except for radiography. There is almost no difference in the total percentage gender distribution to urban areas. In relation to the total gender distribution in the sample population it may be concluded that less female respondents have interest to work in an urban area.

Item 3 – Age profile of allied health professionals

Table 7: Profile of average ages for allied health workers in rural and urban areas

		Average age in rural area	Average age in urban area	Average age per profession
Dieticians	Male	29 years	None	29 years
	Female	29 years	32 years	
Physiotherapists	Male	28 years	None	27 years
	Female	29 years	None	
Radiographers	Male	35 years	41 years	35 years
	Female	39 years	None	
Occupational Therapists	Male	26 years	30 years	30 years
	Female	31 years	None	
Speech & language Therapists	Male	37 years	26 years	37 years
	Female	39 years	None	

The ages of the respondents working in urban areas are indicative to make a conclusion:

Only the dietetic group had females working in an urban area. Their ages ranged between 25 and 47 years with an average of 32 years. All the

professions except the dieticians had males working in urban areas and their ages ranged between 23 and 51 years. Table 7 display the average age per profession in urban and rural areas.

- In the case of females the proposition is thus not true that workers under the age of 25 prefer to work in urban areas.
- In the case of male workers representation is not strong enough to make any conclusion. There are only one male in the sample population under the age of 25 years working in an urban area, the assumption can thus not be proved correct.

Professionals with 7 years and more work-experience are presumed to be experienced. There are 50 of these professionals whom are all above the age of 30 years. Currently there are only 24 professionals above the age of 40 years employed in the Department of Health Limpopo. Sixty one percent of the total sample population can thus be regarded as experienced allied health professionals.

Item 4 – Urban-rural background profile of allied health professionals

Table 8: The background of allied health professionals and their preference to work in urban or rural areas

	Total	Growing up in urban area	Percentage per profession	Growing up in rural area	Percentage per profession
Dieticians	35	3	9%	32	91%
- Urban		1	3%	4	11%
- Rural		2	6%	28	80%
Physiotherapists	24	8	33%	16	67%
- Urban		0	0	0	0
- Rural		8	33%	16	67%
Radiographers	25	11	44%	14	56%
- Urban		2	8%	3	12%
- Rural		9	36%	11	44%
Occupational Therapists	24	9	38%	15	62%
- Urban		1	4%	1	4%
- Rural		8	34%	14	58%
Speech & Language Therapists	12	7	58%	5	42%
- Urban		1	8%	1	8%
- Rural		6	50%	4	34%
Total	120	38		82	
Percentage Work in urban	100%	32%		68%	
Work in rural		4%		8%	
		27%		59%	

Explanation:

- Urban and Rural in table 6 refer to the area of work

An indicative observation is made from the information in Item 4, Table 8.

Of the 31% of respondents who grew up in an urban area, only 4% are still working in an urban area, whereas 27% of the respondents had moved to work in rural areas in the Limpopo Province.

Comparing the 27% of respondents that grew up in urban areas, but moved to work in rural areas, only 8% of respondents who grew up in rural areas moved to work in urban areas.

An assumption can thus be made, that the 4% and 8% respectively, moved or work in urban areas for personal reasons, whereas the 27% is an indication that the rural allowances received for working in rural areas, may have an impact on individual choices regarding the place of work.

Further on in this research, more information will be discussed to eliminate personal and other circumstances in order to make a final conclusion.

Item 5 – Vernacular ability profile of allied health professionals

Of the 122 total respondents in the research sample (n), only 12 respondents are not able to speak the local vernacular. Interesting enough 4 of the 12 respondents are speech & language therapists. Seven of the twelve respondents are English and Afrikaans speaking, 2 respondents are immigrants from other African countries, and only 3 respondents are from the previously disadvantaged groups in South Africa.

Of the 12 respondents who are unable to speak the local vernacular, 6 are willing to relocate from their current area, and 6 are not interested to move from their current area. Eleven of the respondents are currently working in a rural area.

Thus 50% of respondents who are unable to speak the local vernacular, are not interested to relocate to work in an urban area, even though they are unable to communicate fluently in the local vernacular of that rural area.

Item 6 – Home-language profile of allied health professionals

Table 9: Language distribution of all respondents compared to feeding tertiary institution

	Number	Percentage	Australia	Bloemfontein	DRC	England	KZN	Medunsa	University of Pretoria	Unin	UWC	Wits	Zambia	Other
Afrikaans	3	2%		1					2					
Chewa	2	2%											2	
English	5	4%	1			1		1	1			1		
French	2	2%			2									
Lozi	1	1%											1	
Ndebele	1	1%						1						
Pedi	53	44%		2			1	29		17		1		3
Siswate	2	2%						1		1				
S-Sotho	2	2%									1	1		
Tsonga	22	18%						15		3	1	3		
Tswana	5	4%						5						
Venda	20	16%						16	1	2		1		
Xhosa	3	2%						2			1			
Total	121		1	3	2	1	1	70	4	23	3	7	3	3
		100%	1%	2%	2%	1%	1%	58%	3%	19%	2%	6%	2%	2%

Pedi is the most dominant language used by respondents, at 44% of the total respondents, followed by Tsonga with 18%, and Venda with 16%. Medunsa produced 58% of all allied graduates in the Limpopo Province, 41% of these graduates are Pedi-speaking, 21% are Tsonga-speaking and 23% are Venda-speaking.

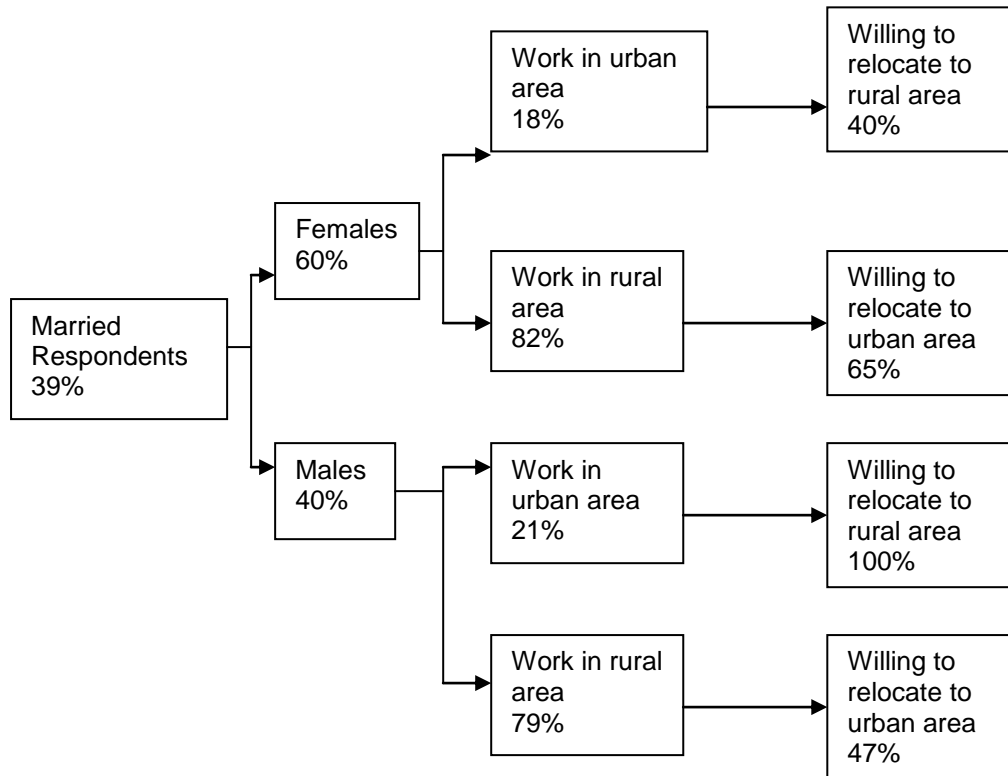
Item 7 – Marital status profile of allied health professionals

During this analysis, the researcher focussed on married allied health professionals, assuming that a married person may have more factors to consider when making a decision or choice to relocate to another area.

Marital status of Allied Health professionals in the Limpopo Province does not play a significant role in the migration or relocation of Allied workers between

rural and urban areas. This conclusion is based on the following information retrieved during the research survey.

Figure 2 – Marital status profile of allied health professionals



Of all the respondents, 39% are married, of whom 60% are females and 40% are males. Of the 60% married female respondents, 18% work in urban areas, 40% of them are willing to relocate to rural areas, whereas 60% are not willing to relocate to rural areas.

This in comparison to 82% of married females working in rural areas, where 65% of them are willing to relocate to urban areas, and 35% are not willing to relocate to urban areas.

Of the 40% married male respondents, 21% are working in an urban area and all of them are willing to relocate to a rural area.

Of the 79% married male respondents who are working in rural areas, only 47% are willing to relocate to an urban area.

Item 8 – Profile of allied health professionals with children

Table 10: Respondents with children and their willingness to relocate

	DT	PT	X-Ray	OT	S & L	Average of sample population
Do have children	74%	50%	77%	63%	54%	64%
Willing to relocate	54%	42%	27%	54%	46%	45%
Not willing to relocate	20%	8%	50%	9%	8%	19%

The allied health professionals, who do have children, range between 50% and 77% within the different professions in the target group. From table 10, it is observed that all professional groups, except for the radiographers, more respondents are willing to relocate between rural and urban areas than those not willing to relocate.

The conclusion is thus that having children and assuming therefore additional responsibilities, still leaves a group of 45% of allied health professionals more willing to relocate than to stay where they are working currently.

Item 9 – Work experience profile of allied health professionals

Table 11: Work experience and the relation to Job satisfaction and Income satisfaction

Experience	Total number of respondents	Level of post or Income	Number Of respondents	No Satisfaction	Some Satisfaction	% Non satisfied and sometimes	Yes to Satisfaction	Satisfied with Income	Not satisfied with Income	Defaulted respondents	% Not satisfied with Income
0 – 1 year	33	Level 6	33	10	15	78%	8	8	23	2	70%
2– 3 years	16	Level 6	16	7	6	81%	3	3	13	0	81%
3– 6 years	23	Level 6	5	1	0	20%	4	1	3	1	60%
		Level 7	4	2	2	100%	0	0	4	0	100%
		Level 8	14	5	6	77%	3	0	14	0	100%
7 years +	50	Level 6	1	1	0	100%	0	0	1	0	100%
		Level 7	2	0	0	0%	2	0	2	0	100%
		Level 8	31	7	17	77%	7	4	26	1	84%
		Level 9	16	3	9	75%	4	1	15	0	94%
	122		122	36	55		31	17	101	4	
Percentage	100%		100%	30%	45%	75%	25%	14%	83%	3%	83%

An analysis of the information in Table 11, leads to the conclusion that there may be a relation between non-satisfaction in the job and non-satisfaction with remuneration across all post levels for allied health professionals in the Limpopo Province.

According to the Epi-info system that was used to apply statistical techniques, the report indicated the uncorrected chi-squared test result as 0,06 with a 95% confidence level. Because the single table analysis is $>0,05$, this conclusion can be accepted as valid.

The highest job satisfaction was recorded amongst respondents still at junior levels.

Item 10 – Post profile of allied health professionals

Table 12: Distribution of respondents and their respective post levels in Limpopo Province.

	Total	Junior L6	Senior L7	Chief/principal L8	Deputy Manager L9 and higher administrative
Dieticians	35	16	0	17	2
Physiotherapists	24	15	0	7	2
Radiographers	26	7	3	13	3
Occupational Therapists	24	11	3	5	5
S & L Therapists	13	6	0	3	4
Total	122	55	6	45	16
Frequency	100%	45%	5%	37%	13%

The data displayed in Table 12 clearly indicate the lack of senior posts – refer Level 7.

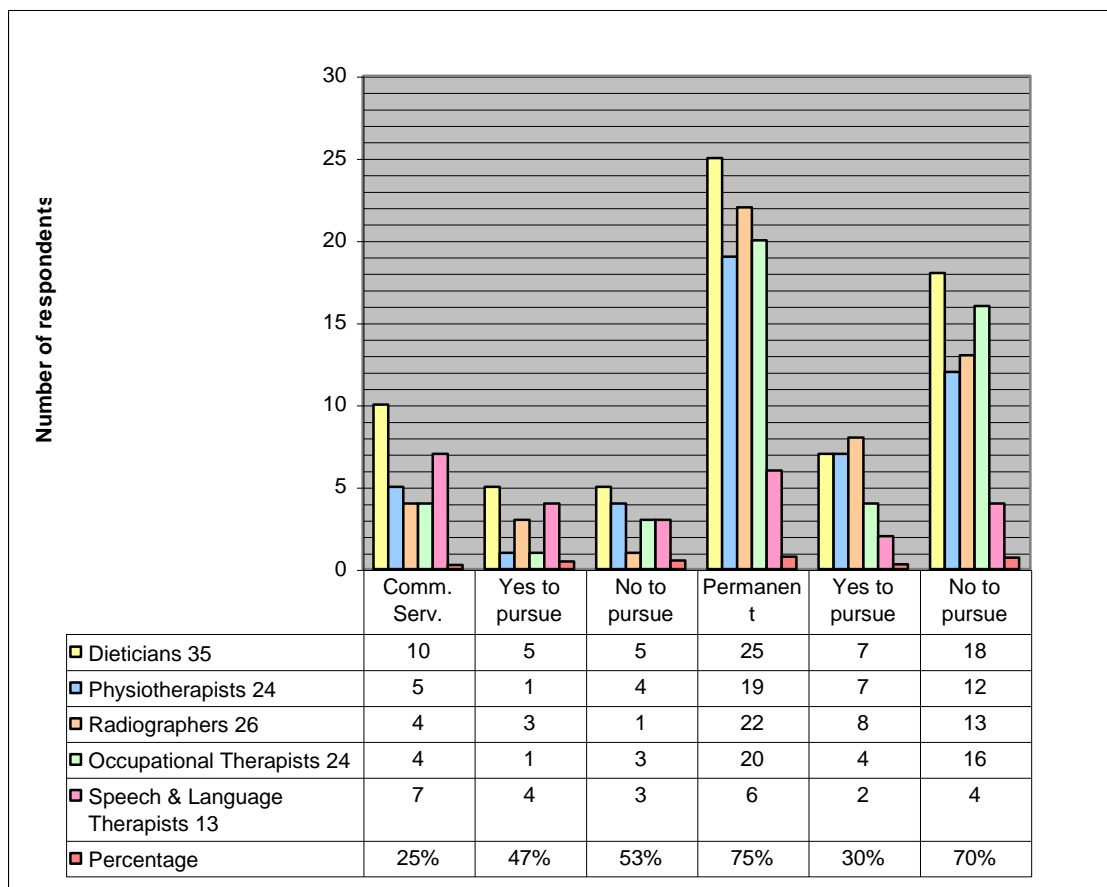
There also seems to be a bottleneck effect at the chief/principal level and this may contribute to the loss of juniors between the Level 6 and Level 8 posts.

This indicates that the retention and recruitment strategy does not have the effect of retaining juniors. The reduced career pathing opportunities seem to be one important factor on migration trends to other provinces or elsewhere.

Item 11 – Community service worker profile of allied health professionals

The following information was obtained from respondents to determine if community service contract workers are interested to be retained to work in the Public Sector as their community service contract will be their first work experience after completing their studies.

Figure 3: Community service workers in Limpopo and permanent employees and their interest to pursue a career in Public services.



Of allied health professionals in the Limpopo Province, 25% are currently doing their community service contract as governed by the HPCSA. According to the information displayed in Figure 3 and the accompanying table, only half of them are interested to pursue a career in Public Health Services. The most concerning information is however that of the 75% of allied health

professionals employed on a permanent basis, only 30% are interested to pursue a career in Public Health Services.

In order to retain them, the specific reasons why they are not interested have to be addressed.

Later on in this report (Item 21), more detailed information will be provided to shed light on possible reasons why allied health professionals in the Limpopo Province are not interested to pursue a career in the Public Health Services.

Item 12 – Post graduate profile of allied health professionals

Figure 4: The percentage distribution of postgraduate qualifications amongst the target group

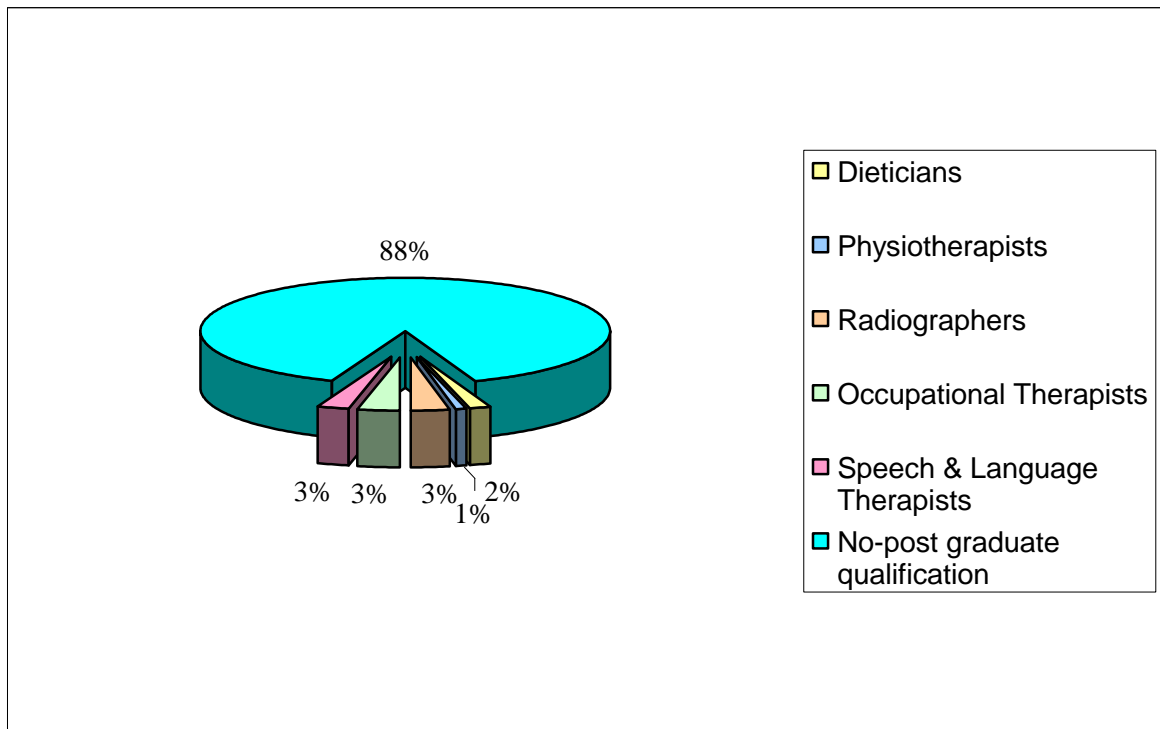


Figure 4 indicates that a total of 12% of the target group, have post-graduate qualifications. The post levels of this group range from 4 juniors, 2 seniors and 7 chief or principal therapists.

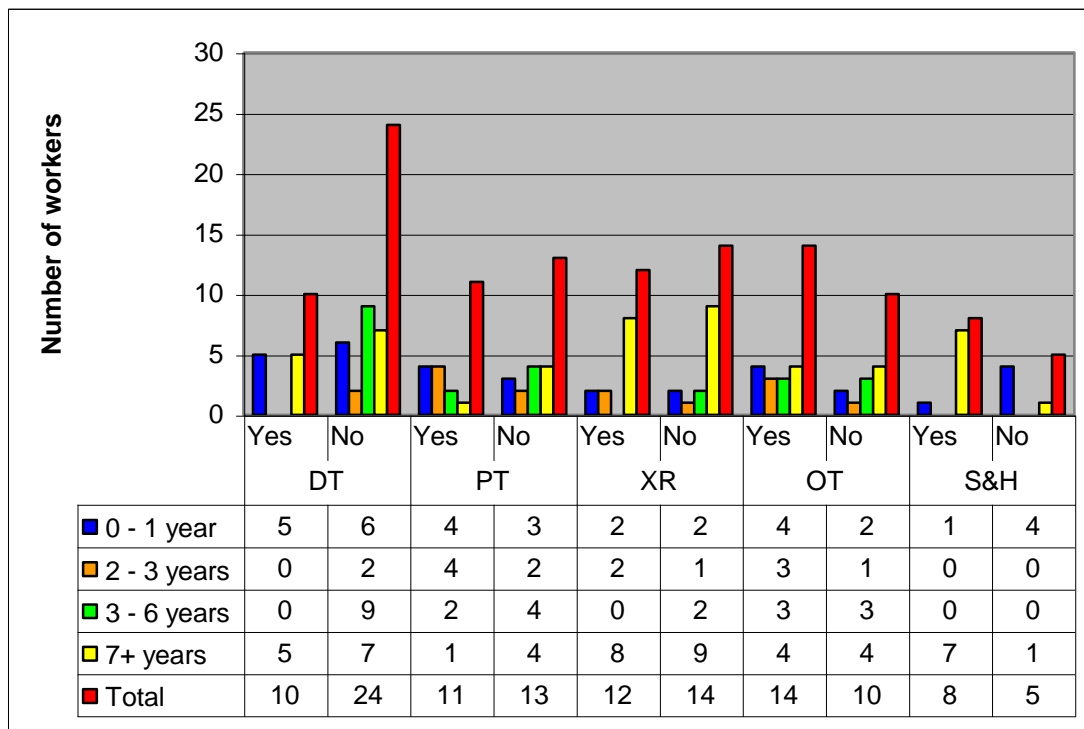
Respondents indicated that they do not get any recognition for postgraduate qualifications and that there is no financial gain or upward mobility opportunities. This non-recognition of post-graduate qualifications may contribute to the reluctance to pursue careers in Public Health Services. Except for personal gratification, no external motivators are present in the

current public service environment. This may lead to an imbalance in qualification and skill, where a junior worker on a level 6 post, qualified with a Master’s degree in Public Health, are supervised by a manager with no management or post graduate qualification, but appointed only on the basis of years of experience.

During the analysis of Item 12, it was clear that many allied health professionals do not have a clear understanding of the meaning “post-graduate”.

Item 13 – Allied health professional’s bursary profile

Figure 5: The relation between bursary holders and the experience of workers in terms of years.



An analysis of Item 13 indicates that in the case of occupational therapists and physiotherapists, bursaries may play a role to retain health workers. They are the only professional groups from the sample population where bursary holders are represented in all the categories of experience levels in the Public Service

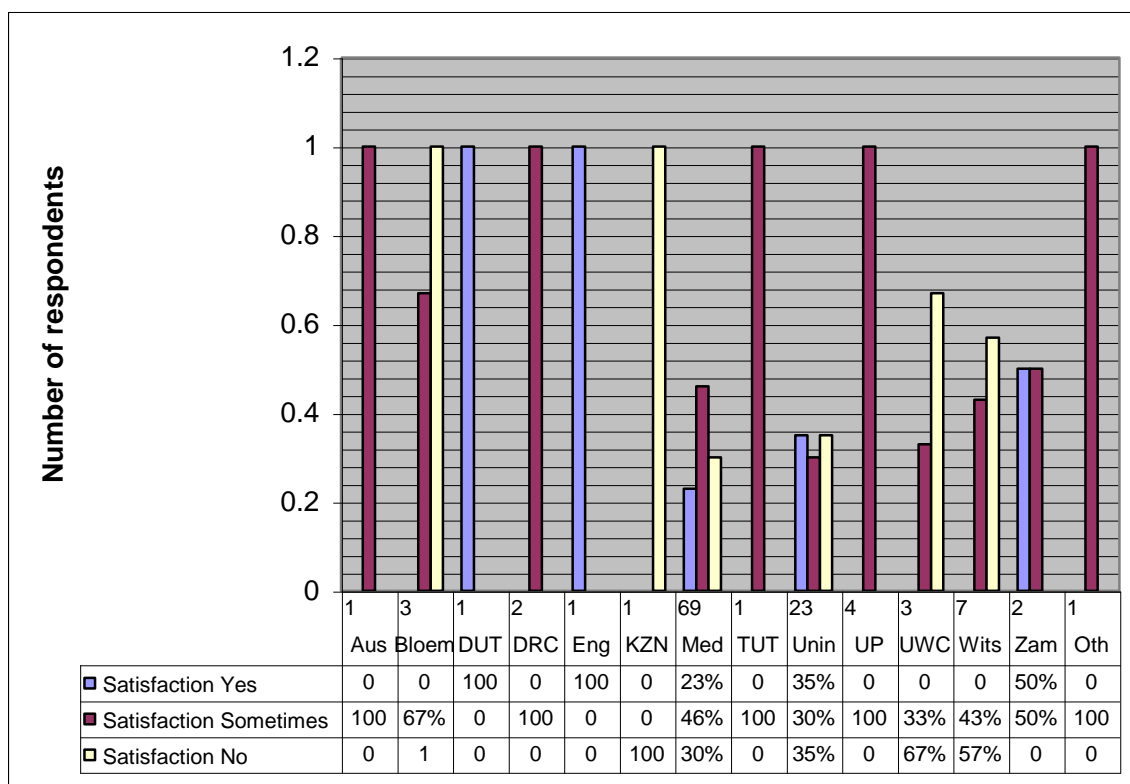
Other professionals including dieticians, physiotherapists and radiographers, may not necessarily stay in the province due to the fact that they are or previously were bursary holders. In all the other professions of the target group, the relationship between experience and being a bursary holder, are not significant enough to draw any conclusion.

Experienced workers from the speech and language group are mostly bursary holders, which may be a result of the recent programme to assist diplomat candidates to become graduates.

Item 14 – Training institution profile of allied health professionals

In Item 6, table 9, it was already mentioned that Medunsa produces 60% of all graduates in the Limpopo Province. University of Limpopo is the second largest producer. Graduates from other universities are so few it is almost insignificant, notwithstanding the fact that the Limpopo Province health department does employ graduates from other tertiary institutions.

Figure 6: The percentage of Job Satisfaction in relation to graduates form different Tertiary Institutions



From Figure 6 and accompanying table, an analysis can only be made for Medunsa and University of Limpopo because other tertiary institutions are not represented in a significant way.

Of the Medunsa graduates, only 23 % are satisfied in their job situation, whereas only 35% of the University of Limpopo is satisfied.

It is therefore a concern that the majority of the graduates from the relevant tertiary institutions is either not experiencing job satisfaction or only sometimes.

With reference to the factors listed in Item 15, (reasons why allied health professionals do not experience job satisfaction) the researcher assumes that this situation is not related to the lack of exposure to practical training in rural situations, but rather to other factors as mentioned in Item 15.

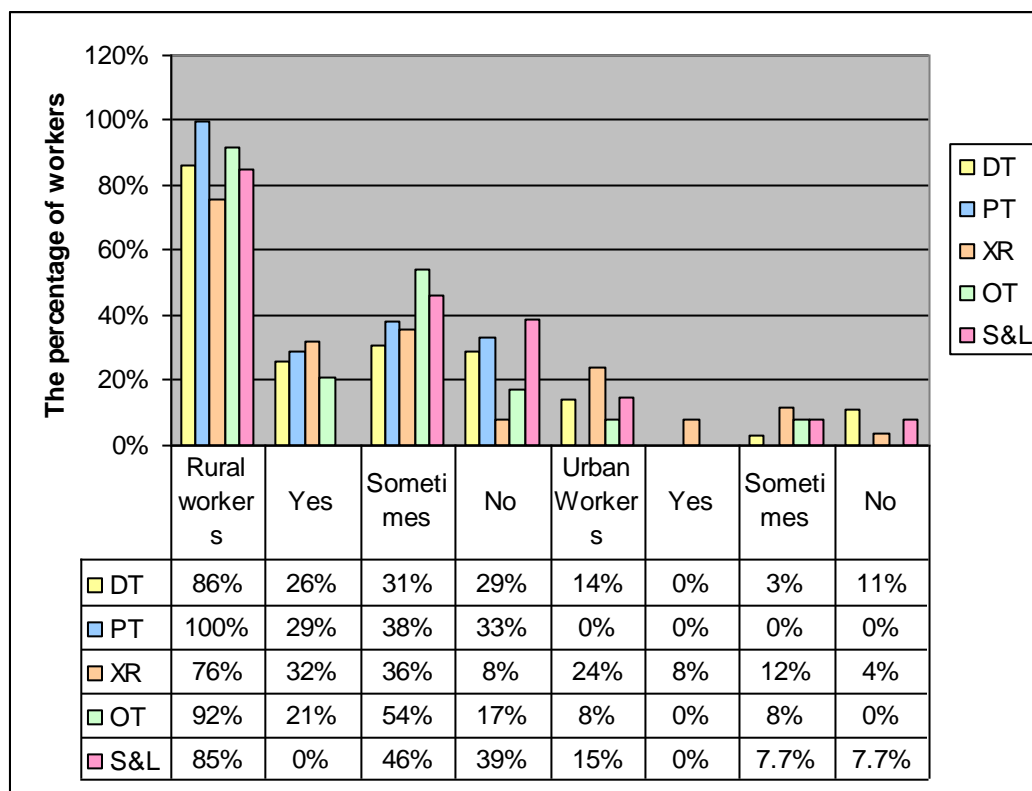
The researcher recommends that further investigation and proof are needed to determine if the opening of doors to higher education for all South Africans contributes to a situation where matric-candidates pursue a tertiary qualification only for the sake of qualifying, without proper career guidance and an understanding of what the actual job will require after qualification.

Item 15 – Job satisfaction profile of allied health professionals

Some reasons for the lack of job satisfaction, listed by respondents, are as follows;

- Inadequate remuneration
- High workload
- Staff shortage
- Inadequate opportunity for upward career mobility
- Inadequate support from management structures
- Inadequate workspace
- Lack of recognition in multi-disciplinary team
- Lack of opportunity to explore in career
- Hospital residential accommodation

Figure 7: Percentages of job satisfaction for urban and rural allied health workers in the sample



Analysing Figure 7 above, the deduction can be made that all professions within the target group, excluding the speech & language therapists, experience more job satisfaction working in rural areas than those working in urban areas.

According to the Epi-info system that was used to apply statistical techniques, the report indicated the chi-squared test result is 1.34. Because it is > 0.05, this conclusion can be accepted as valid.

Furthermore it can also be deduced that most professions only experience job satisfaction sometimes or do not experience job satisfaction at all.

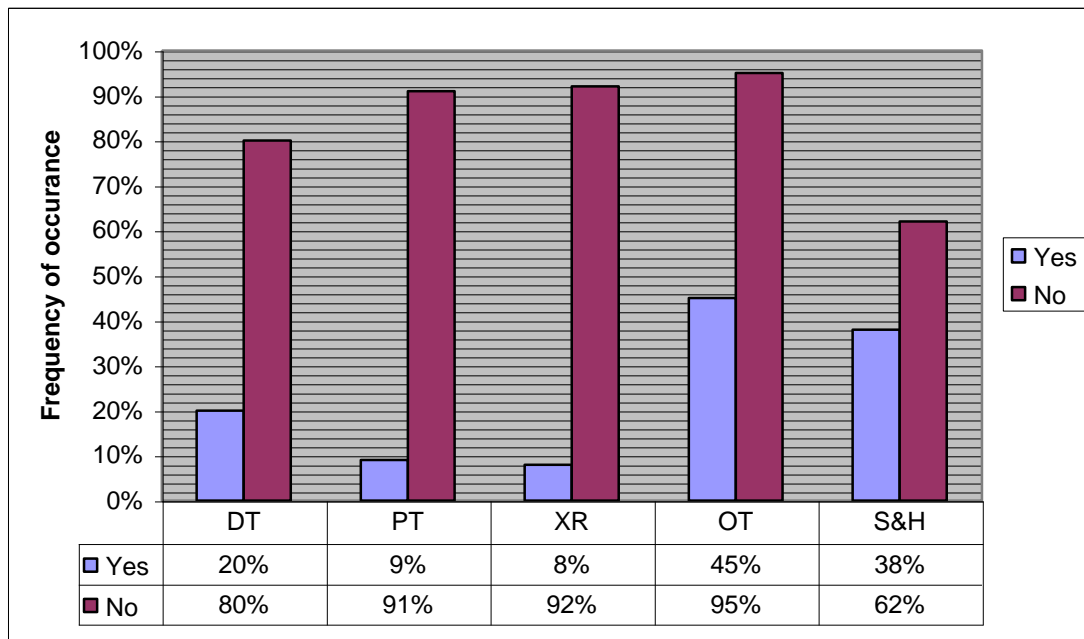
It can thus be concluded that rural allowances may be one of the factors contributing to the experiencing of job satisfaction for those professional workers in rural areas.

The fact that radiographers are the only profession that experiences job satisfaction in urban areas may be linked to the fact that they receive additional overtime payment and a standing call duty incentive.

Monetary reward seems to be directly linked to job satisfaction and will be further investigated in item 16.

Item 16 – Monthly income satisfaction profile of allied health professionals

Figure 8: The frequency of satisfaction in relation to monthly income within the different professions in the target group



A conclusion can be made that more than 60% of all allied health professionals perceive their monthly income as non-competitive with those of their colleagues in the private sector. It was however not expected of them to indicate what is their perception or knowledge on private sector remuneration. It can thus not be deducted that salaries in the public sector are not competitive with the private sector.

Table 13: The percentage professionals on different post levels who don't regard their income as competitive to the private sector

	Dieticians	Physiotherapists	Radiographers	Occupational Therapists	Speech & language therapists
Level 6 Juniors	39.3%	57.1%	26%	38%	37.5%
Level 7 Seniors	0	0	13%	14.2%	0
Level 8 Chief/principals	53.5%	33.3%	47.8%	23.8%	25%
Level 9 Deputy managers	7%	9.5%	13%	23.8%	37.5%

From Table 13 it can be concluded that specifically dieticians, physiotherapists and radiographers on entry level do not regard their income as competitive in relation to those of their colleagues in the private sector.

Occupational therapists and speech & language therapists both on entry-level posts as well as those in more senior positions experience the same.

The majority of dieticians in chief/principal posts do not regard their income as competitive.

Item 17 & 18 – Allied health professionals’ multi-disciplinary team profile & professional regard

Table 14: Allied health professional experience working within multi-disciplinary teams and their perception of how other health professionals regard them

	Total	Work as part of multi-disciplinary team	Services regarded as important by other health team members	Services not regarded as important by other health team members	Not working in functional multi-disciplinary team	Services regarded as important by other health team members	Services not regarded as important by other health team members
Dieticians	35	100%	100%	0	0	-	-
Physiotherapists	24	88%	81%	19%	12%	66.6%	33.3%
Radiographers	26	92%	83%	17%	8%	50%	50%
Occupational Therapists	24	79%	84%	16%	21%	40%	60%
S & L Therapists	13	77%	90%	10%	23%	33.3%	66.6%
Total Number	122	109	97	12	13	6	7
Percentage of total target group	100%	89%	79%	10%	11%	5%	6%
Relative percentage		100%	89%	11%	100%	46%	54%

The table area in black refers to the professionals who work in a multi-disciplinary team and the area in blue refers to the professionals who do not work in a multi-disciplinary team

The conclusion from Table 14 is that 79% of allied health professionals work in a situation where a holistic approach to health care is implemented. This refers to the percentage of professionals who work in a multi-disciplinary team and whose services are also regarded as important by other members of the team. If others members of the team regard their service as important, it is more likely that patients will benefit from all health services available by way of internal referrals.

The remaining 21% either do not work in a multidisciplinary team approach or are not regarded as an important contributory factor to the total health care of patients in the Limpopo Province.

Thus from the above it may result in a 21% impact on the quality of a total health care approach as promulgated in the ANC Health plan (1994:7)

Item 19 – Allied health professional’s experience of resources profile

Displayed in Table 15 a comparison is made between allied health professionals who indicated that they do not have adequate resources to perform their profession in their place of work and those who indicated they do have enough resources in their place of work and how these two groups compared regarding their experience of job satisfaction.

From the sample population 63% of respondents indicated that they do have the necessary resources to perform their profession while 37% indicated that they do not have the necessary resources. Interesting enough 86% of the group that indicated they do not have adequate resources also indicated that their monthly income is not satisfactory in comparison to their colleagues in the private sector, while 100% of the group that indicated they do not have the necessary resources also experience dissatisfaction with their income in comparison to the private sector.

Of the first group with adequate resources, 29% experienced job satisfaction. Of the group who indicated they do not have adequate resources, 20% still experienced job satisfaction.

This begs a question to the researcher as to whether these respondents only perform part of their duties due to a lack of resources, or whether this group persevere to perform their duties in very difficult circumstances. This opens the opportunity for further research.

Table 15: Allied health professional's experience of resources and how it relates to job satisfaction

	Total	Adequate resources in place	Experience non-satisfaction regarding income comparing to private sector	Experience job-satisfaction	Experience job-satisfaction sometimes	Do not experience job-satisfaction	Inadequate resources in place	Experience non-satisfaction regarding income comparing to private sector	Experience job-satisfaction	Experience job-satisfaction sometimes	Do not experience job-satisfaction
Dieticians	35	23	16	8	8	7	12	12	1	4	7
Physiotherapists	24	17	14	6	6	5	7	7	1	3	3
Radiographers	26	13	12	4	6	3	13	13	6	6	1
Occupational Therapists	24	18	16	4	12	2	6	6	1	3	2
Speech & Hearing Therapists	13	6	4	0	3	3	7	7	0	4	3
Total in Numbers	122	77	62	22	35	20	45	45	9	20	16
Percentage Relative percentage		63%	86%	29%	45%	26%	37%	100%	20%	44%	36%

From the information provided by the respondents, all the professional groups mentioned lack of the following resources:

- Equipment
- Physical space
- Human resources (staffing)

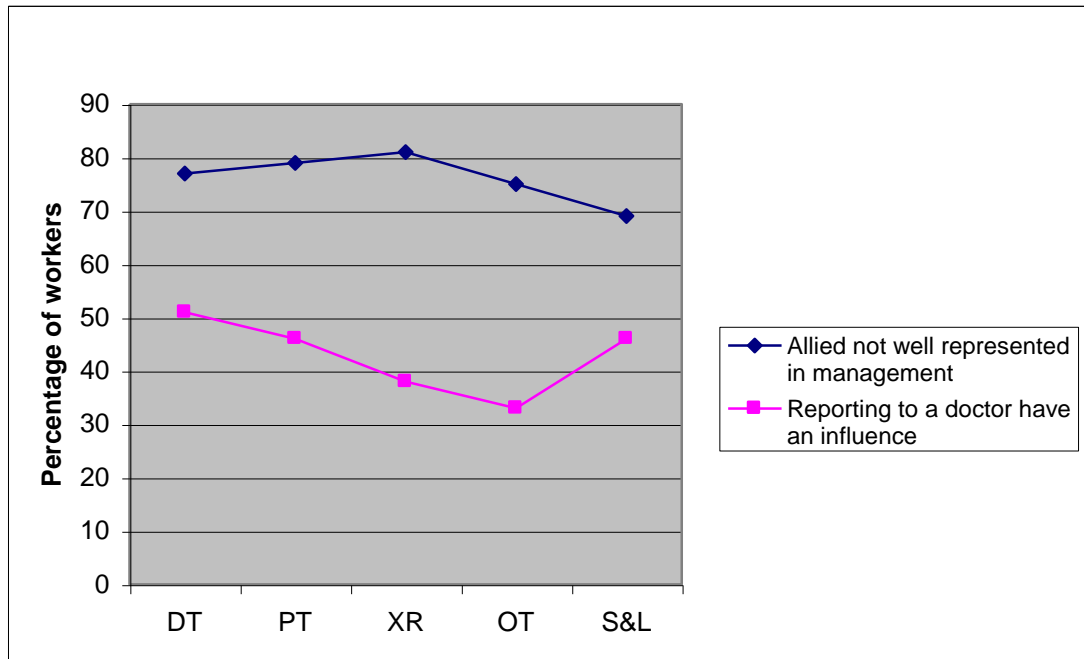
The physiotherapists, occupational therapists and dieticians also noted a limited budget for consumables used during treatment as a constraint.

The conclusion made is that all 5 professional groups in the sample population indicated inadequate resources in the same areas. The 63% of respondents that indicated they do have adequate resources in the workplace, only 29% of them experienced job-satisfaction.

This begs another question to the researcher as to whether the availability of resources truly has an impact on job-satisfaction. This also opens opportunity for further research.

Item 20 & 22 – Allied health professionals’ experience of lack of representation in management structures and the influence by lines of command

Figure 9: Allied health professionals who experience lack of representation in management structures and those that are negatively influenced by line of command



The majority of respondents from all the professions in the target group indicated they are not well represented in management structures.

Within the dietician and speech and language therapy groups, there seem to be correlation between experiencing lack of management representation and reporting to a medical doctor as line manager.

The physiotherapists, occupational therapists and radiographers seemed to experience a greater impact due to the lack of management representation but are less affected that a medical doctor is their line manager.

The percentage relative to each professional group is an indication that allied health professionals in the Limpopo Province are affected by the fact that according to lines of command in the current public service, a medical doctor will always supervise an allied health professional, although they (allied health professionals) are all first line practitioners. This does not apply to radiographers.

Those respondents that indicated they are affected by this structure also indicated the following as their own regard of what their career ceilings in public service should be:

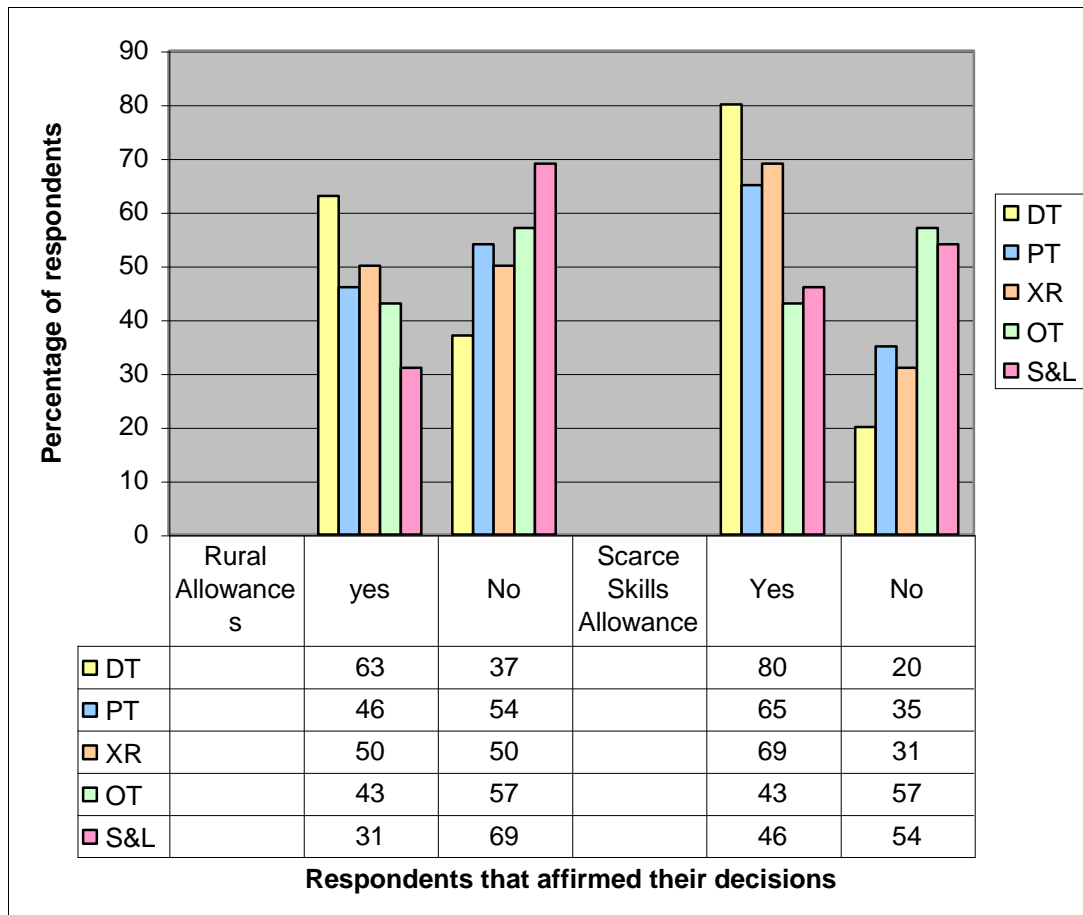
- Chief Executive Officers – level 13
- Managers – level 12
- Deputy Managers – level 9
- National Directors – level 14 to 16
- Provincial coordinators

Some respondents indicated their career goals include having their own private practices.

From this information it can be deducted that lack of management representation may also be a contributing to factor to dissatisfaction in the workplace.

Item 23 & 24 – Scarce-skills and rural allowance’s influence on allied health professionals

Figure 10: Allied health professionals that confirmed rural and scarce skill allowances have an influence on their choice to pursue a career in the Public Service



Analysing Figure 10, it can be concluded that the scarce skills allowance received by allied health professionals has a larger impact on allied health professional’s decision to pursue a career in Public Service than the rural allowance.

According to the Epi-info system that was used to implement statistical techniques it is report reported that, the chi-squared uncorrected test is 44,39 with a 95% confidence level. Because the result is >0.05 this conclusion can be accepted as valid.

There seem to be no difference for occupational therapists between the two kinds of allowances they receive. Both the occupational therapists and the

speech and language therapists seemed to be least influenced by the allowances in total.

Except for dieticians, the rural allowance was not the deciding factor whether they choose to work in rural or urban areas.

The conclusion therefore made is that other factors play a more important role in the migration of allied health professionals between rural and urban areas and not this monetary incentive.

Item 25 – Public or private transport profile of allied health professionals

Item 26 – Profile of distance to nearest town

Item 27 – Profile of distance travelling to work daily

Table 16: Allied health professionals, their mode of transport, distances they travel and the distances to the nearest town/city.

	Dietitians	Physiotherapists	Radiographers	Occupational Therapist	Speech & Language Therapists	Total sample
Public transport	33%	50%	47%	30%	42%	43%
Private Transport	67%	50%	53%	70%	58%	57%
Distance form nearest town/city						
0-10km	26%	29%	42%	46%	31%	34.4%
10-20 km	17%	13%	12%	0	15%	11.4%
20-40 km	11.5%	21%	15%	21%	8%	16%
40-60 km	11.5%	8%	23%	13%	8%	13%
> 60 km	31%	25%	0	21%	38%	22%
Not applicable	3%	4%	8%	0	0	3%
Distance travelled to work daily						
< 5 km	54.5%	54%	73%	42%	69%	57.3%
5-15 km	14.5%	16.5%	15%	29%	8%	17.2%
15-25 km	11%	13%	4%	0	8%	7.4%
> 60km	20%	16.5%	8%	29%	15%	18%

More than 50% of all respondents from the different professional groups make use of private transport rather than public transport, with the highest percentage being the occupational therapists, where 70% use private transport.

The majority of respondents work less than 10km away from their nearest town or city while 22% of respondents work more than 60km away from their nearest town or city.

Fifty seven percent of all respondents travel less than 5km per day to reach their place of work, while 18% travel more than 60km per day. There seem to be an overall difference in the weighted percentages per profession. This may have been contributed to by possible inaccurate guesstimates and not information based on the actual distances. What may also contribute to confusion is the way rural allowances are given and health professional's perception of their nearest towns. Some health professionals working in small rural towns with their own municipalities also receive rural allowances e.g. Bela Bela (Warmbaths) and Makhado (Louis Trichardt). The only urban area that is regarded as urban might be Polokwane as Polokwane hospital staff is the only health workers who do not receive the rural allowance.

This can be confirmed referring back to the first item where the distribution percentage of allied health professionals working in rural and urban areas indicated a relation of 12% urban and 88% rural.

During the analysis of this item only 3% of respondents indicated that the distance from the nearest town is not applicable and 34.4% of respondents indicated that the nearest town or city is less than 10km away from their place of work.

Because the information in the two items seems to be contradictory, no definite conclusion or deduction can be made, but it also leaves a question that may need further investigation.

Item 28 & 28a – Hospital housing accommodation profile of allied health professionals and their opinion of the quality thereof

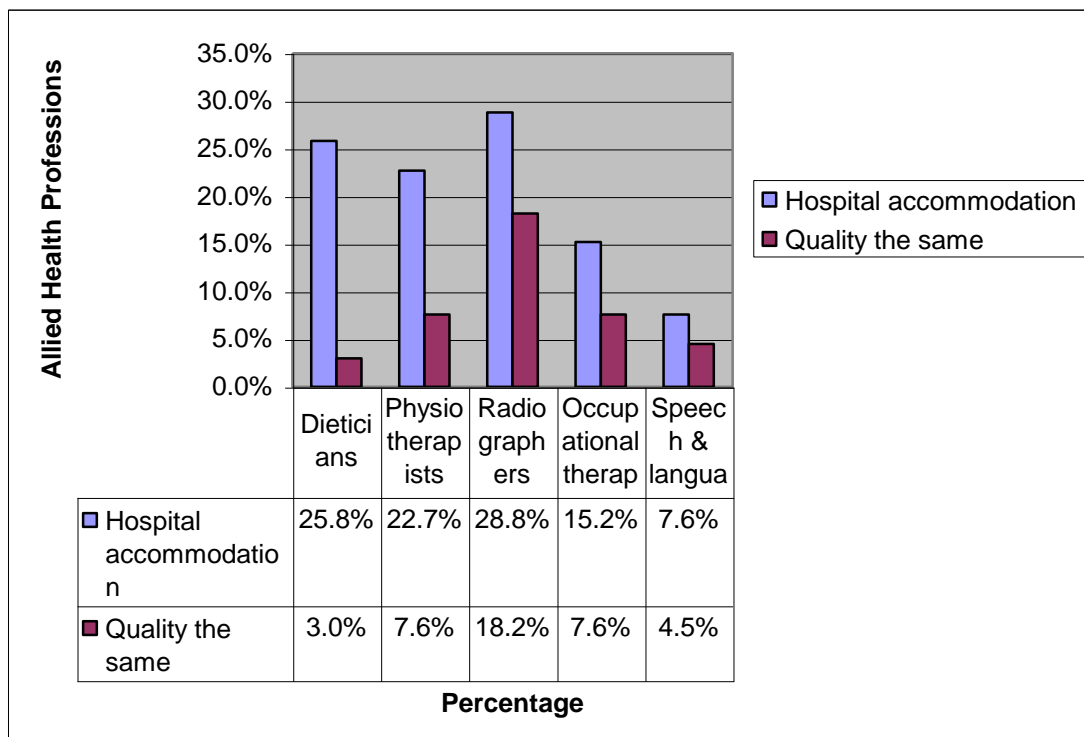
A total of 54% of all respondents make use of hospital accommodation as governed by the Department of Health Limpopo Province's Housing Policy. This policy stipulates that all scarce skilled-professionals qualify for state

accommodation if available. However students, community service workers and interns must enjoy first priority.

As noted in Chapter one, there seemed to be unconfirmed allegations that allied health professionals are not treated the same as other scarce skilled-professionals and therefore the researcher deemed it necessary to investigate the impact of such statements on the recruitment, retention and migration trends of allied health professionals.

Figure 11 is a display of the 54% of allied health professionals that make use of hospital accommodation and the relevant frequency per profession together with that percentage of respondents per profession that indicated their quality of housing accommodation is not of the same as those of other scarce skilled-professionals outside of allied health.

Figure 11: Allied health professionals that make use of hospital housing accommodation and the quality of their accommodation compared with other scarce skilled-professionals.



The conclusion is thus that these unconfirmed allegations be proved, with the radiography profession to be the least influenced and the dietetic profession to be the most influenced. The possibility that the allied health professionals

are influenced to migrate due to this fact might be true but further in depth investigation is needed.

Item 29 – Influence of own accommodation outside the hospital on migration of allied health professionals

To further determine the influence of accommodation on migration, the researcher wanted to establish if owning private property in the vicinity of the place of work will have an influence on the choice of an allied health professional to migrate.

The following responses from the different professional groups contributed significantly: 58% dieticians, 50% physiotherapists, 82% radiographers, 76% occupational therapist and 80% of speech & language therapists indicated that even if they owned or rented their own accommodation outside the hospitals, they would still consider to relocate.

The conclusion is that other reasons except accommodation carry more weight during the decision to relocate.

The argument that the provision of state accommodation makes it easier for health professionals to relocate might partially be true, but the legacy from the previous political dispensation where the rural population was forced to migrate in order to find work might also still play a role.

A further in-depth investigation is recommended.

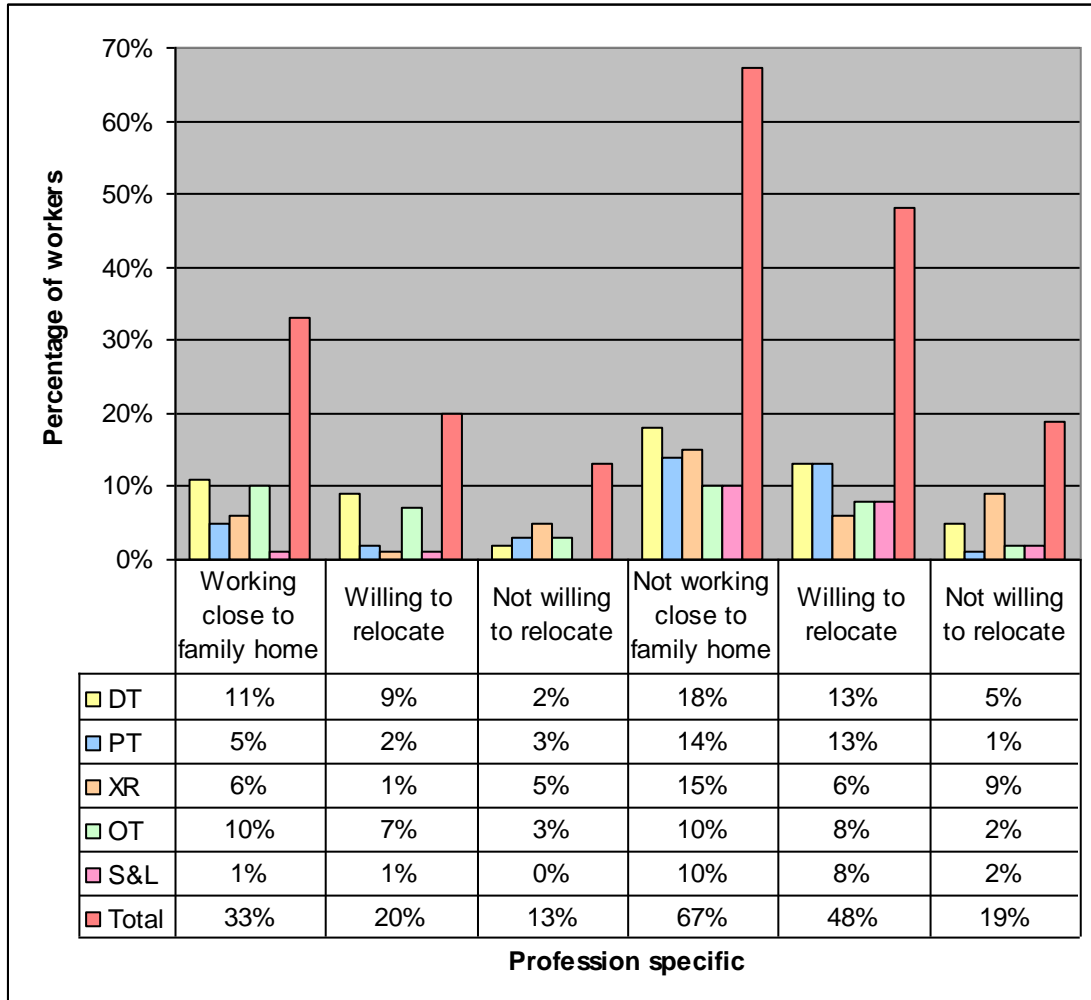
Item 30 & 35 – Influence of working close to family home on willingness to migrate between urban and rural areas.

In order to determine if the living environment plays a significant role, the researcher also wanted to investigate if allied health professionals currently prefer to work closer to their family homes.

Thus the researcher wants to confirm that graduates return to their place of upbringing after they qualified, supporting previous research studies and

recommendations that recruiting prospective students for scarce skilled-professional training should be more focussed on rural areas.

Figure 12: The percentage of allied health professionals working close to their family homes and their willingness to relocate



In total only 33% of allied health professional's work close to their family homes. Of the 33%, 20% are willing to relocate to other areas whether it is to urban or rural areas while 13% are not willing to relocate.

Of the 67% who do not work close to their family homes, 48% are willing to relocate, whether to rural or urban areas.

The conclusion is thus that between 48% and 20% of all allied health professionals, whether working close to their family homes or not, are willing to relocate to urban or rural areas away from their family homes.

It can thus be proofed that recruiting prospective students to be trained in the allied health professions from rural areas, does not necessarily mean that they are more likely to work in the rural area. Other factors will play a role in their decision to relocate.

Item 31 & 35 – Profile of allied health professional sample population property owners and their willingness to migrate between urban and rural areas

In order to determine if being a home or property owner influence the allied health professional in Limpopo Province's decision to relocate or not, the researcher investigated the matter and came to the following conclusion with reference to Table 17:

Table 17: Property owners and their willingness to relocate according to gender

	Property owners	Not willing to relocate	Wiling to relocate	Male	Female
Dieticians	35%	6%	29%	9%	20%
Physiotherapists	33%	16.5%	16.5%	8%	8.5%
Radiographers	38%	15%	23%	15%	8%
Occupational Therapists	25%	17%	8%	4%	4%
Speech & Language Therapists	31%	0%	31%	15.5%	15.5%

Only 25% to 38% of qualified allied health professionals own property, while 57% of professionals make use of private transport (Table 16).

It may be deducted that allied health professionals regard owning private transport more important than investing in property although the private transport does not specify owning a vehicle.

Information displayed in Table 17 also leads to the conclusion that owning property does not necessarily influence the allied health professional's

decision not to relocate. Dieticians and Speech & language therapists seemed more likely to consider relocation even though they own property.

The gender of the property owners does not play a significant role in the decision to relocate or not.

Again the legacy of the past when people were willing to migrate in order to obtain a job may still have an influence on the pattern observed in this investigation.

Item 32 & 33 – Profile of allied health professionals' involvement in community activities and the availability of recreational facilities

The researcher wanted to determine if allied health professionals become part of the local community where they work even if they are not originally from that area.

The result was that 77% of allied health professionals do participate in local community activities where they stay.

The concern is however the 23% that do not participate in community activities. Of that 23%, 17% also do not have recreational facilities available at or close by their place of work.

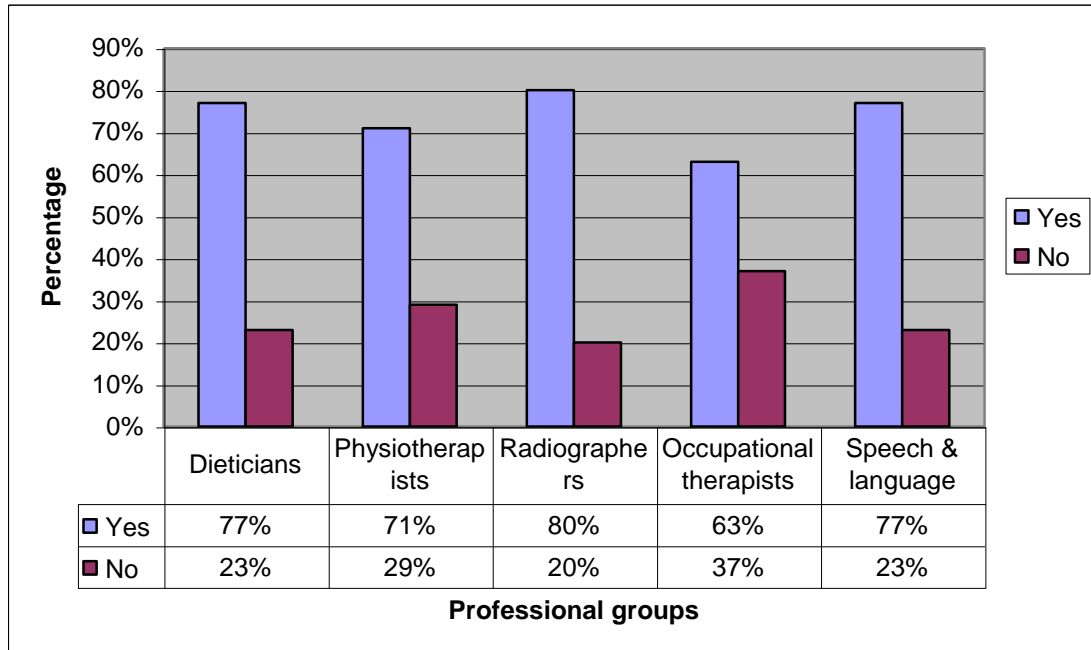
Of this 17%, 14% indicated they are willing to relocate to another province within South Africa without the benefit of rural or scarce skills allowances if they can obtain a higher post.

This 14% of the respondents is a high-risk group that may consider leaving the Limpopo Province.

The conclusion is that there may be a correlation between social interaction and participation and an allied health professionals willingness to relocate.

Item 34 – Profile of allied health professionals willing to relocate to other provinces

Figure 13: Comparison of allied health professionals willing to leave Limpopo Province for a higher post.



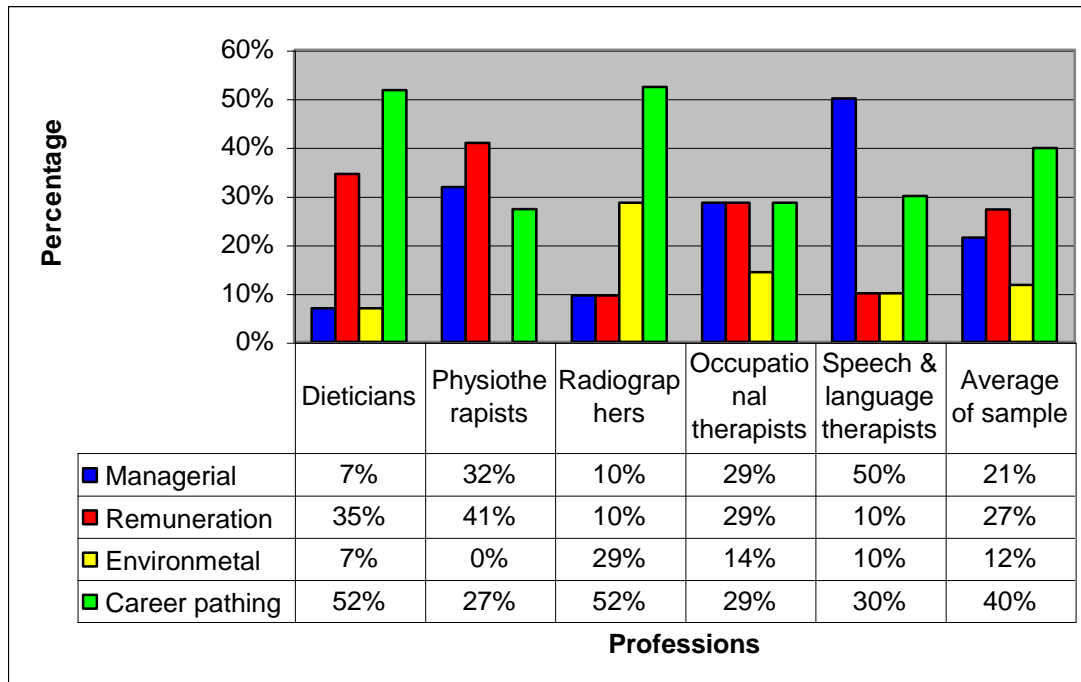
The majority of all five professions within the target group are willing to leave the Limpopo Province without the option of rural allowance and scarce skills allowances if they can get the option of a higher position or post in another Province within the borders of South Africa, as displayed in Figure 13.

The conclusion is thus that allied health professionals are motivated by higher posts to migrate and that rural and scarce skills allowances are not necessarily effective to retain scarce skilled-professionals.

It can also be concluded that allied health professionals within the target group are more motivated by career pathing to relocate than monetary incentives.

Item 35 a – Profile of forces that influence allied health professionals to migrate

Figure 14: Rated reasons why different professions within the target group would migrate between rural and urban areas



The researcher wanted to establish, when asked directly, what would prompt allied health professionals to relocate from rural to urban areas or from urban to rural areas.

During the analysis of the data, the researcher concluded that the respondents did not understand the use of scaling from least influential to most influential, thus some of the data could not be used and presented as a true reflection of forces that influenced the sample population to migrate.

However, the available data was analysed and displayed in Figure 14. The career pathing and remuneration aspects were at times both indicated, contributing to the researcher’s conclusion that they may be regarded as inter-related in the minds of respondents, as one may lead to the other.

Within the occupational therapy group, career pathing, remuneration and management factors weighted equally.

The physiotherapy group regarded remuneration as the most important factor and speech & language therapists regarded managerial factors as the most important.

The radiography group was the only professional group where the environment was weighted as important, second to career pathing.

A final conclusion is thus that from an overall average all the professions within the target group regard career pathing as the most important determination factor when they consider relocating.

Item 36 – Knowledge about colleagues working outside SA’s borders

Item 37 – Existing work experience outside SA’s borders

Item 38 – Interest to work outside SA’s borders

From all five professions in the target group 51% indicated that they personally know a colleague who is currently working outside the borders of South Africa. This percentage may however not be a true reflection as all respondents were not willing to mention the name of the colleague.

However, 7% of the respondents do have work experience outside the borders of South Africa and 62% indicated they are willing to consider an offer outside South African borders. This 62% can however not be taken as a true reflection but nevertheless indicates an interest among allied health professionals from the target group in the possibility of working outside South Africa’s borders.

4.3 CONCLUSION

Chapter four dealt with the analysis and interpretation of data collected during the research survey. Where practical, information is displayed either in Tables or Figures to make it easier for the reader. Most of the information displayed indicated that there is no significant difference between the professions in the target group regarding the factors that may possibly influence them to migrate. The research survey revealed that all the professions within the target group would most likely migrate between rural and urban areas as well as outside the borders of the Limpopo Province for the same reasons. Small differences do exist between the five professions as were displayed in most of the tables and figures.

The majority of professionals can speak the local vernaculars, but there also seem to be a trend of non-job satisfaction, which is directly linked to the income received by professionals in the Public Service in the Limpopo Province.

The information revealed in this chapter however raise concerns, confirming how easily allied health professionals might consider to relocate and especially seeing how many professionals are actually interested to relocate. The lack of job satisfaction within the target group is another serious concern. Career pathing seemed to be the major factor in migration and relocation opportunities and decisions.

The next chapter will focus on the conclusion and recommendations of this research study.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.2 INTRODUCTION

The previous chapter dealt with the analysis of all data collected during the research survey. This chapter will deal with the final interpretation of the information, formulating conclusions and the presentation of proposed recommendations for further research and investigation deriving from this study.

Information will be directly linked to the initial research problem, the objectives as stated and the research question addressed in chapter one.

Interpretation of the information will be applied to prove the descriptive hypothesis and the research propositions.

5.3 CONCLUSION

The problem investigated in this study was to establish if the migration of allied health professionals is contributing to an imbalance and unequal distribution of health care services in rural and urban areas in the Limpopo Province.

The study successfully proved that allied health professionals are not contributing to an unequal distribution of health care services in the Limpopo Province, and that the distribution of allied health professionals is in line with the population distribution in the Limpopo Province.

Another objective of the study was to determine if migration of allied health professionals mainly takes place within South Africa between provinces or if global recruitment plays a role.

The study confirmed that the majority of all professions in the allied health profession target group are willing to leave the Limpopo Province.

A majority of allied health professionals also indicated they are interested in job offers from outside the borders of South Africa.

The study thus proved that migration of allied health professionals mainly takes place between provinces within the borders of SA, but that global recruitment plays a role in luring allied health professionals.

The study was therefore successful in addressing the initial research problem.

The descriptive hypothesis is described in chapter one, namely:

‘Allied health professionals in Limpopo migrate from rural to urban areas and other Provinces within the borders of SA for the same reasons’.

The study proved that all five professions within the allied health group indicated the same reasons that motivate them to consider migration.

The study was thus able to prove this descriptive hypothesis as true.

A number of propositions that were made in chapter one was proved to be correct, while others were proved to be untrue.

- **Allied health professional’s home language influences their preference to work in rural areas.**

This proposition was proved to be untrue, home language has no influence on an allied health professionals’ preference to work in a rural area. Out of the 11 official languages recognised in South Africa, 10 were represented in the research and only 5 of them (including Afrikaans and English) are supposedly to be typical of the regions within the Limpopo Province.

- **Upward mobility or “career pathing” influences allied health professional’s decision to migrate between rural and urban areas.**

This proposition was strongly confirmed during the analysis of the research study. All the professions within the allied health professional group indicated that career pathing was the biggest factor in the consideration of migration.

- **Management structures influence allied health professional’s decision to migrate.**

This proposition is proved to be true. Occupational therapists, physiotherapists and the speech and language therapists all indicated managerial factors in close relation to other factors as a motivating reason to migrate.

In addition all professionals indicated that their professions are not well represented in management and that having a medical doctor as a line manager has a negative influence on their decision to pursue careers in public service - in some professions more than others. All these proven factors are directly linked to management structures.

- **Allied health professionals younger than 25 years of age prefer to work in urban areas.**

This proposition was proved to be untrue. Both male and female allied health workers under the age of 25 years work in rural areas.

- **Remuneration influence allied health professional’s decision to migrate.**

This proposition is proved to be true. All professionals within the allied health professions group indicated that their salaries are not competitive in relation to the private sector.

Increased remuneration is also directly linked to career pathing and thus higher posts.

A majority of professionals within the allied health professions group indicated that they are willing to leave the province for a higher post level without the benefit of rural allowance. This pose to be another unconfirmed problem. It seems that allied health professionals do not get the necessary assurance of improved remuneration as opposed to the assurance of a higher post level.

5.4 RECCOMMENDATION FOR TARGET GROUPS

- **Managers in allied health services:**
 - ✓ All senior professionals in middle-management positions should be officially trained in management skills to avoid the situation where junior professionals are better qualified than their supervisors who were appointed purely on the basis of years of experience.

- **Head of Department for Department of Health, Limpopo Province:**
 - ✓ Develop a structure to promote career pathing for allied health professionals.
 - ✓ Develop competitive remuneration packages for allied health professionals.
 - ✓ Create senior posts at level 7 for allied health professionals as a career pathing incentive to reduce the loss of junior professionals from the province.
 - ✓ Recruit professionals from a bigger variety of tertiary training institutions.
 - ✓ Develop a plan to implement a proper multi-/intra disciplinary approach to support the National Health Plan of the South

African Government towards total health care and reduce the focus on medical care only.

▪ **Tertiary Institutions:**

- ✓ Recruit prospective students from all areas, not necessarily from rural areas as it is proved that they do not necessarily want to work in rural areas.
- ✓ Develop a basic vernacular course which is profession-specific, to enable professionals to perform their skills more easily, specifically speech and language therapists.

5.5 RECOMMENDATION FOR FUTURE RESEARCH

- At this stage the researcher recommends that further investigation is needed to determine if the changes after 1994 and the opening of doors to higher education contribute to a situation where matric-candidates pursue a tertiary qualification only for the sake of qualifying, without proper career guidance and understanding of what the actual job will require after qualification.
- The contradictory information regarding the distribution of allied health workers between rural and urban areas in Limpopo Province and the distances of allied health workers to their nearest town or city leaves an unanswered question that needs clarification.
- The argument that the provision of state accommodation makes it easier for health professionals to relocate might partially be true, but it seems that the legacy from the previous political dispensation, where the rural population was forced to migrate in order to find work, still plays a role. The current situation may also stimulate entitlement

among health workers in South Africa. An in-depth investigation is recommended.

- The researcher also recommends further research to determine whether the availability of resources truly has an impact on job-satisfaction. It also needs to be determined if allied health professionals only perform part of their duties due to a lack of resources, or whether they persevere to perform their duties in very difficult circumstances if resources are not truly available.

5.6 SUMMARY

All the objectives as identified in chapter one was reached in a satisfactory manner.

The contributing factors to an imbalance of health services was successfully addressed as well as the reasons why the focus group will or will not migrate between rural and urban areas within the Limpopo Province or to other provinces.

Specific reasons that may contribute to the migration of allied health professionals were identified. Career pathing and remuneration are the most important, followed by managerial factors and finally environmental factors.

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