

University of KwaZulu Natal

**THE IMPACT OF NATIONAL STRATEGIES IN ADDRESSING
CHALLENGES FACED BY HUMAN RESOURCES FOR HEALTH
IN RURAL KWAZULU – NATAL**

GRACE W. MBURU

2013

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RURAL KWAZULU – NATAL**

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**A Thesis submitted in fulfillment of the requirements for the degree of
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Governance**

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Supervisor's permission to submit for examination

Date: 25th July 2013

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As the candidate's supervisor I agree to the submission of this dissertation for examination. **To the best of my knowledge, the dissertation is primarily the student's own work and the student has acknowledged all reference sources.**

The above student has also satisfied the requirements of English language competency.

Name of Supervisor: Gavin George

A handwritten signature in black ink, appearing to read 'Gavin George', written over a light grey rectangular background.

Signature:

DECLARATION

I, **Grace W. Mburu**, declare that

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- (ii) This dissertation/thesis has not been submitted for any degree or examination at any other university.
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ABSTRACT

The shortage of Human Resources for Health (HRH) is critical in developing countries. In South Africa, the capacity of HRH has reduced significantly since the 1990s, which can be attributed to e.g. emigration of health professionals to developed countries, increased disease burden, and insufficient production of HRH. This raises concerns as South Africa is home to the largest population of people living with HIV globally, estimated at 5.7 million. The distributions of HRH between urban and rural areas are notably uneven, largely due to problems of attracting and retaining workers to the rural areas. It is estimated that 46% of the population lived in rural areas but are only served by 12% of doctors and 19% of nurses. Furthermore, the shortage of HRH in the rural areas is as a result of the challenges faced by the HRH in the rural areas namely: poor working and living conditions, inadequate salaries and benefits, lack of training and career development opportunities among others. The Government has come up with several policy initiatives and National strategies aimed at addressing these challenges including community service, recruitment of foreign doctors to work in under-served areas, provision of rural allowance, and the Occupational Specific Dispensation (OSD).

This study sought to determine the challenges faced by HRH in rural KwaZulu-Natal (KZN) and to review the impact of National strategies in addressing these challenges. The study is based on the talent management theoretical framework which emphasizes on adopting the right attraction, selection, engaging, developing, and retention strategies. The study was conducted in Hlabisa sub-district of Umkhanyakude located in northern KwaZulu-Natal. Cluster sampling was used to select 17 clinics into 3 groups. A random sampling was then used to select the two clinics from each cluster to be used in the study. Data was collected by conducting in-depth individual interviews among 25 HRH. A tape recorder was used to capture data, which was then analysed by highlighting the key statements which were used to identify themes. The themes for each interview were then compared to identify commonalities and differences in order to come up with overall themes which provided basis for writing up how these respective themes are interrelated.

The findings of the study provide evidence on the impact of policy interventions in addressing the challenges faced by HRH in rural areas. In line with previous studies, the study shows that national strategy initiatives aimed at addressing the challenges faced by HRH in the rural areas are working but only to a certain extent. For example the health professionals are happy with the implementation of OSD, which means the government has adequately addressed the issue of salaries. The community service and recruitment of foreign doctors to work in rural areas is partially addressing the problem of staff shortage. However, some of the specific challenges like the poor working and living conditions which greatly contribute to the HRH decision to leave the rural areas do not have specific strategies addressing them. Therefore, there is need for a more comprehensive approach in the formulation of these strategies to ensure that the challenges are addressed adequately. Our study highlights the need for a constant review of the impact of the Government strategies against the challenges they are designed to mitigate to ultimately address shortage of HRH in rural areas. Some of the study limitations include: limited literature on the topic since there are very few evidence based studies that have looked at how national strategies are impacting on the challenges of HRH in rural areas. the talent management theoretical framework was adopted in the absence of a more appropriate framework on management of scarce skills, and the study was conducted in one of the sub-districts in KZN which might limit its generalisability to other settings.

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ABBREVIATIONS

ART	Antiretroviral Treatment
AHP	African Health Placements
CSA	Centre for Study of Aids
DoH	Department of Health
DHE & T	Department of Higher Education and Technology
DPSA	Department of Public Services and Administration
FOMSS	Friends of Mosvold Scholarship Scheme
GDP	Gross Domestic Product
HRH	Human Resources for Health
HRH SA	Human Resource for Health – South Africa
HPCSA	Health Professionals Council of South Africa
HEARD	Health Economics for Aids and Research Development
IMR	Infant Mortality Rate
KZN	KwaZulu Natal
MMR	Maternal Mortality Rate
MBchB	Means – Bachelor of Medicine
NGO	Non- Governmental Organization
OSD	Occupational Specific Dispensation
OECD	Organization for Economic Co-operation and Development
RA	Rural Allowance
SA	South Africa
SANC	South African Nursing Council
SSA	Scarce Skills Allowance
RUDASA	Rural Doctors Association South Africa
RHAP	Rural Health Advocacy Project
SHRM	Strategic Human Resource Management
UCT	University of Cape Town
UL	University of Limpopo
UKZN	University of KwaZulu Natal

UFS	University of Free State
UP	University of Pretoria
UNAIDS	United Nations AIDS
WHO	World Health Organization
WIRHE	Wits Initiative for Rural Health Education
UK	United Kingdom
WSU	Walter Sisuru University
Wits	University of Witwatersrand

CHAPTER 1 - INTRODUCTION

1.1. Introduction: Background of the Study

Inadequate Human Resources for Health (HRH) has been identified globally as the major hindrance to delivery of essential health services (Mangham and Hanson, 2010). Consequently most of the developing countries are unable to achieve the health related millennium development goals (WHO, 2010, Vujicic et al., 2009). In Africa, the shortage of HRH is more prevalent in the rural areas, which puts an incredible strain on the health care system, resulting in preventable deaths and an increased burden of disease (Buchan and Calman, 2006). In South Africa, the capacity of HRH has reduced since the 1990s resulting in insufficient doctors and nurses working in the public sector. This raises concerns, especially considering South Africa is home to the largest population of people living with HIV globally (5.7 million) (UNAIDS, 2009). This high disease burden has put pressure on health facilities, creating a heavier burden on HRH, which has resulted in the need to increase the health care workforce in order to alleviate the workload, especially in the rural areas. However, efforts to attract and retain HRH in rural areas have shown mixed results.

1.1.1. Reasons for the shortage of HRH

The shortage of HRH can be attributed to a number of factors, which includes brain-drain, where trained workers move to other countries. This emigration is mostly spearheaded by the active recruitment by the wealthy nations, like Europe, North America and the Gulf States (Breier and Wildschut, 2006). On the other hand, most of HRH migrate from public to private sectors; in 2007/2008 an estimated 30% of South Africa's medical practitioners and 15.5% of pharmacists worked in the public sector where they served an estimated 85% of the population, while 70% worked in private sector serving 15% of population. Furthermore, rural-urban migration is a major cause of shortage of HRH in rural areas (George, 2009). There also appears to be slow progress in the replacement of the ageing nurse population. In 2008, approximately 63.7% of the nurses were beyond 40 years while in 2006, those aged 25-29 years comprised only 8.9% of the total health care workforce (George, 2009). Moreover, there hasn't been much

progress in introducing mid-level cadres, whilst retirement and death of health professionals is a further factor. HIV is considered to be another major cause of healthcare professionals shortage. The HIV prevalence amongst HRH was estimated at 20% in those aged 18-35 years, 15% in those aged 25-35 years and 13.8% among student nurses (Shishana et al., 2004, Connelly et al., 2007).

1.1.2. Challenges faced by HRH in rural areas

The shortage of HRH in the rural areas is as a result of various challenges. These include inadequate salaries and benefits, lack of adequate training and career development, poor working conditions, poor living conditions, overwhelming patient loads, inadequacy of supplies and technology, isolation, distances to clinics, emotional burnout, few or no specialists, broken referral systems. This often results in migration. This includes rural-urban migration, as well as migration from the public to the private sector (WHO, 2006a, Lehmann, 2008, Bushy, 2006, Wilson et al., 2009, Baumann et al., 2001).

1.1.3. Governments' Intervention Strategies

The South African Government has come up with several policy initiatives and national strategies aimed at addressing the challenges faced by HRH. These are strategies to increase the production and retention of workers, to improve the working conditions and remuneration packages of professionals in the public health sector. These strategies include community service, increasing the production of HRH, recruitment of foreign doctors to work in under-served areas, provision of scarce skills and rural allowance, and the implementation of Occupational Specific Dispensation (OSD) (DoH., 2006, Lehmann, 2008).

1.2. Problem Statement

In South Africa, the distributions of HRH between urban and rural areas are notably uneven, largely due to problems of attracting and retaining workers in the rural areas. It is estimated that 46% of the population lives in rural areas but are only served by 12% of doctors and 19% of nurses (Hamilton and Yau, 2004). Furthermore, it is indicated that rural areas receive only 2.9% of the total number of medical graduates each year. Two

million of the 9.4 million people living in the rural and informal settlements in KwaZulu-Natal (KZN), South Africa's most populous province, do not have adequate care (CSA., 2004). According to Chris Maxon, spokesman for the KZN Department of Health (DoH), the shortage of doctors in rural KZN is critical. "It's difficult to lure doctors into the rural areas, and most rural KZN hospitals are staffed by foreign doctors who work for a short time only to return back to their countries."(The Times, 2010).

The Government's intervention strategies are meant to address the shortage of HRH. However, the effect of these strategies in addressing the shortage of HRH in the rural areas is yet to be established. This affirms the findings of other studies looking at the effect national strategies have on retention of HRH in the rural areas. According to Couper (2005) even with the introduction of community service most doctors would still abandon their community service and migrate to urban areas, private sector or abroad (Couper and Hugo, 2005). Further research has shown that after one year of community service the community of therapists indicating their intentions to work within the public sector declined from 50% at the beginning of the community service to 35% at the end, and only about 16% were interested in remaining in the health facility where they served (Day and Gray, 2008). Additionally, a study by Couper (2003), shows that even though the strategy to recruit foreign doctors as a way of overcoming the challenge of staff shortage has been effective, this strategy should only be viewed as a short term solution. There should be more efforts to ensure that "appropriate for rural" doctors and nurses are being produced in order to cope with the current HRH shortage (Couper, 2003). Recent studies have shown that financial incentives like rural allowance and OSD are important incentives that influence the HRH decision to work in underserved areas, however, they need to be combined with other non-financial incentives. A study conducted by Reid showed that financial incentives are just one of the factors that influence the decision to work in rural areas (Reid, 2004). In that study, the health professionals highlighted other factors as career development, job satisfaction, and educational opportunities as important factors, especially for the young professionals. Moreover, a study by Ditlopo et al. suggests that attracting and retaining HRH in the rural areas requires a combination of both financial incentives and non-financial incentives (Ditlopo et al., 2011). This is also supported by DoH (2006) statement that acknowledged that even though the allowances

are effective, they lacked a clear, structured relationship with other retention strategies, especially non- financial incentives to retain HRH within the public health service.

The studies outlined above show that interventions need to be informed by the specific nature of the problem, which in this case, are the challenges faced by HRH, which pushes them out of the rural areas. The current study unpacks the challenges facing the HRH in rural KZN and evaluates how adequately the national strategies are addressing these challenges.

1.3. Objectives of the study

The study seeks to:

1. Determine the challenges faced by HRH in rural KZN.
2. Review the impact national strategies have had in addressing the challenges faced by HRH in rural KZN.

1.4. Proposition of the study

Against the talent management theoretical framework, this study is based on a null hypothesis, which states that implementation of national strategies seeking to address the challenges faced by HRH will attract and retain HRH in rural areas.

1.5. Research Questions

This study is designed to answer the following research questions:

- I. What are the challenges faced by the HRH working in rural KZN?
- II. What impact do the national strategies have in addressing the challenges of HRH in rural KZN?

1.6. Context and Justification of the Study

The study was conducted in Umkhanyakude district, Hlabisa sub-district, which is a predominantly rural setting served by one district hospital and 17 primary health care clinics. Most of the people walk to the clinics; a majority walking at least an hour to

reach the nearest clinic. Since doctors are scarce, this has resulted to the adoption of a nurse- and counsellor-led model of HIV care in the clinics. The area has amongst the highest HIV prevalence in KZN, peaking at 50% in women aged 25-30 years at the population level (Houlihan et al., 2011). The high disease burden in this setting may add an extra strain on the existing health care system which is already disadvantaged by shortage of HRH. Therefore, understanding the challenges facing HRH in this setting and the impact national strategies have in addressing these challenges may inform on the implications of policy initiatives in ensuring adequate health care in rural areas.

1.7. Conclusion

This chapter outlines the purpose of the study by looking at the background of the study, which shows the HRH shortage both globally and in Africa and then narrows down to rural South Africa which faces an even greater challenge of shortage of HRH. It shows the reasons for shortage, and the challenges faced by the HRH in rural areas. Further, the problem statement is defined which is followed by the objectives of the study which are to determine the challenges faced by HRH and the effect of national strategies in addressing these challenges in rural KZN. The context and justification of the study are provided.

1.8. Outline of the dissertation

This dissertation is made up of six chapters. Chapter 1 consists of the introduction to the study. Chapter 2 provides a review of literature which is related to the study, which has been used in the write up of the findings. Chapter 3 outlines the methodology of the study. Chapter 4 contains the findings of the study. Chapter 5 presents a detailed discussion of the findings. This is followed by the summary of the conclusions and recommendations on how the study will inform policies and future research in chapter 6.

CHAPTER 2- LITERATURE REVIEW

2.1 Capacity and distribution of HRH

Introduction: 2.1.0

This first part of the literature review presents a discussion of existing knowledge on the capacity of HRH, the shortage of HRH both at the global and national levels, the maldistribution of HRH between the public and private sector, the urban–rural distribution of HRH, the migration of HRH to developed countries and the reasons associated with the shortage of HRH.

2.1.1. Human Resource for Health global capacity

According to the World Health Organization (WHO), there are 59.8 million HRH globally. However, fifty-seven countries, mostly located in Africa and Asia, have been identified as experiencing a critical shortage of HRH. This shortage comprises 4.2 million of the total health workforce, out of which doctors, nurses and midwives account for an estimated 2.4 million. The regions which contain the largest healthcare workforce as shown in table 1 below are America and Europe (WHO, 2006a).

Africa has a HRH density of 230 per 100,000 of the population, and about three-quarters (78.2%) of the continent has been identified as having a critical shortage of HRH. The WHO proposed a HRH to population ratio of 230: 100,000 as the level under which a critical shortage can be determined. Failure to attain this minimum level would result in compromising the achievement of the Millennium Development Goals. The WHO reiterated concerns of the HRH shortage crisis particularly in Africa due to the high burden of disease. 70% of people living with HIV/AIDS are in sub-Saharan Africa, yet this region has only 3% of the world's HRH and commands less than 1% of the world's health expenditure (WHO, 2006a). In sub-Saharan Africa, the WHO estimates a shortage of more than 800,000 doctors, nurses, and midwives and an overall shortage of 1.5 million HRH (WHO, 2006a). In order to overcome this shortage the WHO predicts that the total health workforce in Africa has to increase by 139% (WHO, 2006b).

Table 1: Shortage of HRH by region

	Total Health workforce		No. of countries with critical shortages#		Countries with shortages		% of govts health expenditure paid to HRH*
	Number	Density /100000	Total	With shortages	Estimated shortage	% increase required	
Africa	1640 000	230	46	36	817 992	139%	29.5%
Eastern Mediterranean	2100 000	400	21	7	306 031	98%	50.8%
South East Asia	7040 000	430	11	6	1164 001	50%	35.5%
Western Pacific	10 070 000	580	27	3	32 560	98%	45%
Europe	16 630 000	1890	52	0	NA	NA	42.3%
America	21 740 000	2480	35	5	37886	40%	49.8%
World	59 220 000	930	192	57	2358470	70%	42.2%

#The WHO criteria for identifying a critical shortage of HRH is determined by a health care professional to patient ratio of lower than 230 in a country and failure to achieve 80% coverage level of skilled birth attendants (WHO, 2006).

*this figure consists of the wages, salaries, and allowances of HRH as a percentage of government health expenditure. Not all countries in region had data available on the proportion of government expenditure that was allocated to HRH.

Source: WHO (2006)

2.1.2. South Africa's HRH capacity compared to other countries

South Africa's density ratios for medical practitioners and nurses are much better compared to other southern African countries like Mozambique, Zambia and Lesotho, as shown in table 2. "Based on these ratios South Africa is ranked slightly higher than low income countries which have a ratio of 50:100,000 or less, but is hugely under-resourced in comparison to middle income and high income countries that have medical practitioner and nurse ratios of 180:100,000 and 280:100,000 respectively. South Africa's combined medical practitioner and nurse density ratios are above the minimum level of 230:100,000 recommended by the WHO. South Africa's favourable density ratios however hide internal disparities particularly between provinces and between public and private sector" (George, 2009)

Table 2: Cross country comparison of physician and nurse density per 100 000 population

Country	Medical practitioner density per 100 000	Nurse density per 100 000
Mozambique	3*	21#
Lesotho	5*	62#
Zambia	12*	174
Zimbabwe	16*	72#
Namibia	30	306
Botswana	40	265
South Africa	77	408
USA	256	937
France	337	724
UK	230	1212

*Countries falling below the WHO minimum level for medical practitioners per 100 000 population (20:100 000). # Countries falling below the WHO minimum level for nurses per 100 000 population (120: 100 000) (Hall and Erasmus, 2003)

Source: WHO (2006)

2.1.3. HRH trends in South Africa

The capacity of HRH in South Africa has reduced since the 1990s as a result of insufficient doctors and nurses in the public health sector due to: low production rates, attrition of health professionals, poor working conditions, lack of replacement of the ageing nurse professionals, migration, and the increasing burden of care on the health care system as a result of HIV/AIDS. In 2010 there were 150,509 registered health professionals in the health sector, and an estimated total of 290,000 of all cadres constituting the health workforce (MoH HRH, 2011). Research shows a deficit of approximately 19,000 nurses in 2008 and a vacancy rate of 56% for professional nurses and midwives. In 2007/2008 an estimated 30% of South Africa's medical practitioners and 15.5% of pharmacists worked in the public sector where they served an estimated 85% of the population. The ratios of professional and enrolled nurses to the population have deteriorated over the years: from 251:100,000 in 1994 to 116.6:100,000 in 2008 for professional nurses and 59.7: 100,000 in 2001 to 55.4: 100,000 in 2008 for enrolled nurses (George, 2009). This is a worrying trend, considering South Africa is home to the largest population of people living with HIV globally (5.7 million) (UNAIDS, 2009).

HIV patients might account for 60-70% of hospital expenditures in medical wards as predicted by the Health Economics and HIV/AIDS Research Division of the University of KwaZulu-Natal (IPS News, 2010). This pressure on health facilities will impose a heavier burden on HRH resulting in the need to increase the health care workforce in order to alleviate the workload. The increased workload and other poor working conditions may lead to the HRH seeking alternative employment outside of the health system.

2.1.4 Production and growth rates of HRH

The rate of growth and the production levels of HRH in South Africa are not sufficient enough to alleviate the critical shortage facing the country currently. As shown in Table 3, figures from the Department of Higher Education and Training, the production of medical graduates in the faculties is not at full capacity. On average, the number of medical graduates produced in the country between 1996 and 2005 was 1175 per annum (MoH HRH, 2011). With regard to HRH registering with professional bodies, professional nurses have the lowest growth rate of 1.8%, followed by pharmacists (2.3%), and medical practitioners (2.5%). The number of professional nurses qualifying from universities and technikons increased from 2262 to 2371 between 1999 and 2008 (a 4.8% increase in production), while that of the professional nurses enrolled for bridging courses decreased by 13.8% over the same time. In total the production of professional nurses went down by 3% between the year 1999 and 2008, which raises concerns considering the production of the professional nurses has to increase by 13.1% in order to keep up with the increasing population. The output of enrolled nurses on the other hand has risen from 2568 in 1999 to 6154 in 2008 (an increase of 139%). It had been forecasted that there would be a deficit of an estimated 18 758 nurses by 2011 (George, 2009).

Table 3: Number of MBChB graduates from 2000 to 2008

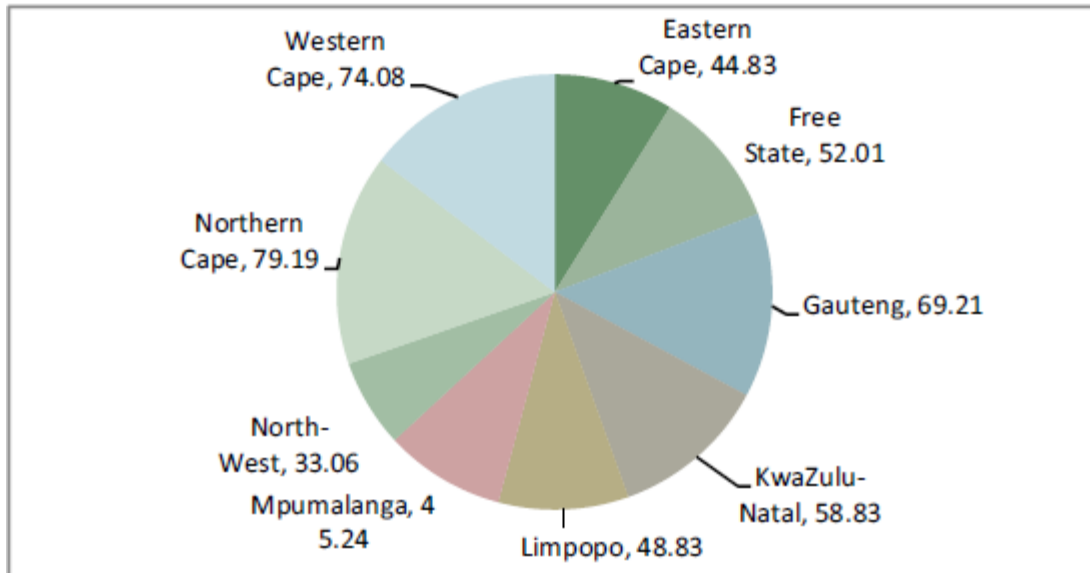
Institution	2000	2001	2002	2003	2004	2005	2006	2007	2008
UCT	134	162	167	155	159	150	185	160	164
UL	235	249	243	283	238	294	239	200	153
UKZN	90	116	132	165	178	298	201	189	224
UFS	110	115	109	88	167	106	105	129	109
UP	203	212	203	184	180	197	207	198	200
Stellenbosch	140	140	129	177	148	150	170	149	167
WSU	26	43	48	56	119	69	89	97	103
Wits	193	192	181	188	205	247	170	175	189
TOTAL	1131	1229	1212	1296	1394	1511	1366	1297	1309

Source: (MoH HRH, 2011)

2.1.5. Density and distribution of HRH

The nine provinces in South Africa experience a variation in distribution of the HRH, as shown in figure 1 below. While Gauteng had the largest number of HRH in 2010, the Northern Cape had the highest ratio of total HRH per population. Consequently the ratio of HRH per 10 000 population (33.06) in North West province is less than half of the ratios in Gauteng, the Northern Cape and Western Cape. The Eastern Cape on the other hand has roughly half of the density of HRH compared to that of Western Cape and Northern Cape.

Figure 1: Density (per 10 000 population) and Distribution of HRH across the provinces of South Africa



Source: DHE&T 2010

2.1.6. Distribution of HRH between private and public sector

A study by Saunders shows that 30% of doctors (10 653) work in the public sector where they attend to 85% of the population, while the 70% of the doctors (24 034) are based in the private sector serving the other 15% of the population (Saunders and Llyod, 2009). Table 4 below highlights the number of people served by the various health professional categories between the public and private sector in 2007. The ratio of general doctor per population in the private sector was 1 to 588 or 1 to 243 when only the medical aid scheme members are accounted for. On the other hand in the public sector a general doctor attends to between 7 to 17 times more people. The specialist per population ratio shows a 23 fold difference between the public (1:10 811) and the private (1:470) sector. Furthermore, the nurses in the public sector attended to six times more people (1:616) than in private sector (1:102) (McIntyre and Heever, 2007).

Table 4: Distribution of HRH between the public and private sectors in 2007

HRH Category	Private sector	Public sector
Population per general doctor	(243) 588*	4192
Population per specialist	470	10 811
Population per Nurse	102	616
Population per pharmacist	(762) 1853*	22 879
Population per hospital bed	194	399

*The data in brackets represents only medical aid scheme members (approximately 14.8% of the population).

Source: (McIntyre and Heever, 2007)

2.1.7. Mal-distribution of HRH between urban and rural areas

Table 5 below illustrates the uneven distribution of HRH between the rural and urban provinces. In South Africa the nine provinces have medical practitioners' density ratios higher than the minimum level proposed by the WHO of 20:100,000 population. It is worth noting that these figures represent a combination of both public and private sector and that the density ratios for all the nine provinces decreased between 2001 and 2004. Rural provinces, for instance the Eastern Cape, Mpumalanga, Northern Cape and Limpopo, have the lowest number per 100,000. On the contrary, the provinces that host the country's major cities like Gauteng, Western Cape, and KwaZulu-Natal, have a much higher number of medical practitioners per population.

Table 5: ratio of medical practitioners per 100,000 population across provinces, 2001 and 2004

Province	2001	2004
Eastern cape	34	27
Free State	69	54
Gauteng	173	126
KwaZulu- Natal	70	52
Limpopo	21	18
Mpumalanga	42	30
North west	30	23
Northern Cape	54	42
Western Cape	182	147

Source:(Hall and Erasmus, 2003)

Table 6 illustrates the ratio of professional nurses per 100,000 population for the period 2006-2008. The figures reveal an increase in the number of nurses per 100,000 population with all nine provinces having a nurse density ratio which is higher than the minimum level proposed by WHO of 120:100,000. However, there are marked imbalances in the distribution of professional nurses between the urban provinces and the rural provinces. For instance there are more nurses per 100,000 population in the Western Cape, Gauteng, and KwaZulu-Natal, than in the rural provinces of Eastern Cape, Limpopo, and Mpumalanga. In 2008 for example, the ratio of professional nurses to the population was an estimated 82% greater in Gauteng than that of Mpumalanga and the density ratio of professional nurses in the Western Cape was approximately 56% greater than that of the Eastern Cape.

Table 6: The ratio of professional nurses per 100,000 population, for the period 2006- 2008.

Province	2006	2008
Eastern cape	289	328
Free State	387	410
Gauteng	565	529
KwaZulu- Natal	456	492
Limpopo	303	365
Mpumalanga	286	290
North west	336	403
Northern Cape	370	339
Western Cape	543	512

Source: South African Nursing Council (SANC) (2008, 2009)

There is a need to put more emphasis on recruitment and retention of more HRH in the rural areas and also coming up with both short and long term initiatives and an HRH plan which should be relevant to the rural health care context. The national, district, and facility level leadership need to be committed to ensuring that rural recruitment and retention strategies work (Versteeg and Couper, 2011). The government, however, has come up with initiatives to address this imbalance in HRH between rural and urban. An example is the National Health Act no. 61 of 2003 that made provision for a certificate of need, which every health professional that wishes to establish a private practice would

require. The idea is to decrease the concentration of health professionals in urban areas, which makes it possible for private businesses to be established in under-resourced areas (Bateman, 2007b).

2.1.8. Migration of HRH

The shortage of HRH can partly be attributed to the migration of HRH. This emigration mostly comes about by the active recruitment from wealthy nations in Europe, North America and Gulf States (Breier and Wildschut, 2006). These emigrations are a result of push or pull factors. The pull factors that are perceived are: more attractive working conditions, including better salaries and wages in destination countries, quality and variety of specialty training offered, better living standards, political stability in destination countries, and career development. The push factors on the other hand drive the HRH away and these include poor working conditions, risk of occupational exposure, low salaries, political instability, crime and violence, and poor quality of life (Natalie, 2012).

According to Hamilton and Yau, the source regions associated with migration of health professionals include Africa, the Caribbean, South Asia and South East Asia, while their destinations are mostly countries like Canada, the US, UK, Australia, New Zealand, Western Europe and the Gulf states (Hamilton and Yau, 2004). In South Africa, this loss of medical practitioners through migration was first realized in 2002, which saw a loss of 36 doctors in 1996, and consequently an increased loss of 156 doctors in 2003, which was a very big number considering there were only 1296 medical graduates in 2003 (Breier and Wildschut, 2006). Table 7 below shows the estimated number of HRH working abroad between 1998 and 2006.

Table 7: International Migration of South African HRH

Category	1998	1999	2000	2006
Medical practitioners	105	83	105	8921
Nurses and midwives	133	117	147	6844
Other HRH	110	101	126	7642
Total	348	301	378	23407

Source: Department of Health (2001)

The information above provides similar results to those of a study conducted by Erasmus in 2008 which showed that a quarter of the South African medical practitioners had migrated. In 2006, the WHO estimated that 37% of doctors and 7% of nurses had migrated from South Africa (WHO, 2006a). Researchers estimate the migration of nurses to be between 1% and 2% per year, which means that in 2008 the number of nurses who have migrated would be between 2128 and 4256 (Wildschut and Mqgolozana, 2009). The factors that draws the HRH to developed countries include better and easier working conditions, better wages and better opportunities for professional development (DoH., 2006). OECD highlights the following as the reasons the HRH leave South Africa for developing countries which is cited in Brier and Wildschut (2006):

1. Insecurity and Crime
2. Affirmative action
3. Deterioration of public education
4. Uncertainties about the future
5. Perceived fragility of the SA economy
6. The transferability of SA qualifications in OECD member countries
7. Integration into a knowledge based global economy with sharply increased competition skills
8. Foreign recruitment
9. Higher rates of pay abroad
10. Deteriorating conditions in the public sector (OECD, 2004 cited (Breier and Wildschut, 2006))

2.1.9. Conclusion

This review took a look at HRH capacity both at global and local levels in relation to the country's population and how the capacity is distributed among the public and private sector and among rural and urban areas. It also presents information on migration of HRH to either the private sector or abroad. The following chapter contains a continuation of the review which informs on the objectives of the study which is to determine the challenges facing HRH in rural South Africa, and the National strategies adopted by the government to address these challenges.

LITERATURE REVIEW – PART 2

2.2. Challenges and the national strategies

2.2.0. Introduction

This section seeks to provide a review of national strategies addressing the challenges faced by HRH in rural KwaZulu Natal through the Talent Management Theoretical Framework.

2.2.1. Challenges faced by HRH in rural areas

The problem of attraction and retention of HRH to the rural areas is mostly defined by specific issues that face the HRH which determine their decision to stay in or leave the rural areas. Rural South Africa accounts for 46% of the population but is only served by 12% of doctors and 19% of nurses. Out of the about 1200 medical students that graduate every year, only 35 will end up in rural areas to work there permanently (George, 2009). The shortage of HRH in the rural areas is mostly due to migration from the rural to urban areas (Bateman, 2007a). These emigrations are largely due to the challenges faced by HRH in the rural areas and hence their decision to leave the rural areas. These challenges include inadequate salaries and wages, poor and unsafe working conditions, lack of career development opportunities, lack of management support and supervision, work overload, emotional burnout, inadequate resources and poor infrastructure (DoH., 2006, WHO, 2006a, Lehmann, 2008).

According to Bushy (2006), the challenges associated with HRH in rural areas can be classified into: contextual challenges and professional challenges as shown in Table 8.

Table 8: Challenges faced by HRH in the rural areas

Type of Challenge	Description
Contextual Challenges	<ul style="list-style-type: none">● Poor living conditions● Poor infrastructure● Unfavourable weather conditions● Isolation● Distances to clinics● Family and lifestyle issues● Ethical conflicts about the treatment
Professional Challenges	<ul style="list-style-type: none">● Inadequate salaries● Poor working conditions● Management and supervision● Inadequate supplies and equipment● Lack of training opportunities● Lack of career development opportunities● Emotional burnout● Outsider Bias● Few or no specialists in the area● Broken referral systems● Limited professional backup● Work overload

Rural Australia and Canada (Kulig et al., 2003) identified similar challenges facing the HRH in rural areas. These included: nurse shortages which results in increased overtime and call-backs, heavy patient loads which translates to incompetent care, high levels of stress, safety concerns, especially during night shifts and worries about domestic violence during home visits. The issues and challenges facing rural nurses in Nova Scotia, Canada, were identified as recruitment issues (attracting nurses to rural communities and safe practice for new recruits) as well as retention issues (quality of work life, limited work opportunities, continuing education and scope of practice). Furthermore, renewal issues were identified as leadership and succession planning, interdisciplinary and other forms of collaboration and planning and policy development. Pong and Russell, further highlight the lack of support for continuous education and limited job opportunities and challenges facing the HRH in rural areas (Pong and Russell, 2003).

In a study seeking to investigate reasons for poor recruitment and retention in rural areas and the policy interventions in Kenya, the nursing trainees cited the following challenges encountered in the rural areas: poor infrastructure, inadequate educational facilities, inadequate career educational opportunities, higher workloads, inadequate supplies, poor management and supervision, working in communities dominated by other tribes and isolation from family (Mullei et al., 2010).

Furthermore, Wilson and Couper et al listed the challenges faced by the rural doctors as follows: academic isolation, lack of consultant support, insufficient locum relief, poor physical infrastructure, family and lifestyle issues which include access to good schools for children, poor recreational infrastructure, inadequate accommodation facilities, and limited job opportunities for spouse (Wilson et al., 2009).

Fooks et al, 2002 and Baumann et al, 2001 highlight the following as the challenges facing the health professionals in rural areas: work load, lack of remuneration for overtime, role ambiguity, inadequate support and resources, lack of recognition and feedback from immediate supervisors, geographic distances and isolation, being on call, difficulty refusing overtime in small communities, nurse-physician relationships, poor workplace environment and safety (Baumann et al., 2001, Fooks et al., 2002).

Working conditions

Improving working conditions is an important component of retaining HRH in rural areas. According to Schumacher (1997), 91% of the nurses leave their jobs and their professions due to dissatisfaction in the working conditions. This includes ensuring there is sufficient equipment and supplies. Supervision and management is a good way of improving job satisfaction and hence retention in rural areas. Studies show that some countries like Papua New Guinea and the Philippines found that supervision results in HRH job satisfaction, performance and quality of care provided in rural areas (Douglas, 1991, Loevinsohn et al., 1995). In a study seeking to evaluate perceptions of nursing posts in the rural Kenya, the nurses cited infrastructure, high workloads, inadequate

supplies and supervision as the negative perceptions of rural life (Mullei et al., 2010). Further, a study conducted in rural South Africa shows that workload was highlighted as one of the factors that influences HRH to leave the rural areas (Reid, 2004). A study in rural Vietnam found that difficult working conditions were some of the discouraging factors facing HRH (Barnighausen and Bloom, 2009). A WHO study found that health professionals working in the public sector in Cameroon, Ghana, South Africa, Uganda and Zimbabwe highlighted “working conditions” as a key factor that influences their migration decision (WHO, 2004). Moreover a study evaluating motivation and retention of health workers in developing countries found that most health workers reported that improving working and living conditions maybe more effective than increasing wages to reduce migration flows (Willis-Shattuck et al., 2008). De Villiers on the other hand, highlights working conditions which include hospitals that are poorly equipped and that have an excessive workload as a factor that need to be addressed in-order for doctors to equitable and quality hospital service (De villiers, 2004).

Management and supervision

Good management and supervision is very important for any employee. Health professionals working in rural areas need to feel valued and cared for especially due to the conditions they work under. This can be done by way of recognition and appreciation, by the clinic and hospital managers, fellow colleagues, and the community in which they are working. A study from Tanzania shows that although physical infrastructure and equipment were reported as some of the challenges which contribute to de-motivational factors, the need to feel valued and supported was much greater. Furthermore, being trusted by the community was a crucial component for motivation (Manongi et al., 2006). According to Neuhauser poor management is one of the contributing factors to a decline in health professionals standards and that, to ensure staff retention, the management needs to nurture an organizational culture that inspires loyalty and commitment coupled with a mix of norms values, expectations, policies and procedures.

Furthermore, Neuhauser notes that the relationship the employee has with the supervisor determines 50% of work-life satisfaction, implying that management contributes to the

staff decision to stay or leave. Hence it is imperative for the management to ensure good working relationships with staff as it contributes to retention (Neuhauser, 2002).

Living conditions

Living conditions have a direct effect on the HRH decision to stay and work in rural areas. This includes infrastructure: roads, electricity, sanitation, telecommunications, schools and housing. Thailand, for example, has embarked on a district development programme which aimed at improving general infrastructure (roads, phones, water supply, and radio communication), as well as the staff housing at rural district hospitals (Nitayarumphong et al., 2000). In Ecuador community service doctors stated transportation, communication, housing, food and access to water and electricity as some of the challenges facing them during their practice (Cavender and Alban, 1998). Another study conducted in the US at the Navajo Area Indian Health Service program, shows that the health workers referred to “poor local school systems” and “marginal housing facilities” as the reasons for possible relocation from their setting (Kim, 2000). A study conducted in rural Limpopo on retention of South African doctors highlighted improvements of living conditions which included “improving rural hospital accommodation”, “providing recreational facilities” and “assisting rural doctors families” as key themes on what the doctors thought would retain them in the rural Limpopo setting (Kotzee and Couper, 2006). There is limited evidence on the countries that have come up with strategies to improve the living conditions of rural settings.

2.2.2 Factors influencing attraction and retention of HRH in rural areas

Developing appropriate strategies to deal with challenges facing the HRH in the rural areas requires an in-depth understanding of factors that influence their decisions to accept to stay and work in the rural areas (Lehmann, 2008). These factors have been looked at in previous studies (Couper et al., 2007, de Vries and Reid, 2003, Pong and Russell, 2003, Playford and Larson, 2006, WHO, 2010) and include the following:

Personal factors. Personal factors include attributes like background, service to community, age, and gender among others. For the health professionals who were born

and brought up in rural areas, coming back to work in a rural area can be best described as a sense of returning home to one's roots, a place where you can identify with people and family, a familiar context and hence they are comfortable working there. To most of them, coming back to work in a rural area is a way of giving back to the community that nurtured and supported them while they were growing up. In doing so there is a sense of maintaining the connection with the community, while working in an urban area would give one a sense of 'disconnection'. Secondly, some health professionals come back to rural areas as a way of reconnecting back with their families. The elderly nurses also feel more established in rural areas having worked here for many years. To those who value family time, they may treasure the tranquillity of rural areas which provides more quality time with the family and a safe environment for children, and a network of friends as opposed to urban life where people tend to be busy and neglect family ties.

Contextual factors significantly contribute in health professionals' decisions to work in rural areas. These include, for example, the physical environment. Some HRH appreciate the peacefulness of a rural setting, fresh air, lack of traffic, and more relaxation time which would not be the case in urban settings. The health professionals appreciate the attitude of the rural patients who are easy to talk to, appreciative and less demanding unlike in urban areas.

Facilitating Factors. Exposure to rural practice during training often prompts some students to remain and work in rural areas. To some health professionals an understanding of the needs in the rural areas, especially the high disease burden prompts in them the urge to go and serve in rural areas.

Career related factors. In order to ensure retention of HRH in rural areas, there is a need to provide career development opportunities. This can be achieved by ensuring access to career development programmes, professional development course, workshops which would ensure that the HRH don't leave the rural areas in search of personal development opportunities. It would also get rid of isolation by ensuring that there are networks which provide interaction between health professionals.

Reinforcing factors. According to Couper, 2003, this means “Being a role model for others and an advocate for the broader community, being able to teach younger colleagues, students and community service professionals, thereby instilling service values and a vision of the potential of rural practice, was important. This responsibility may go beyond the individual mentoring relationship, to a broader role; representing the profession in the area and a broader advocacy role, in terms of community upliftment and improved rural health care”. This could be achieved by ensuring some interaction between HRH serving in rural areas and medical students e.g. by having outreach programmes where students are afforded sufficient time to learn from mentors in rural settings.

Financial factors, including salaries, benefits and allowances are also important as to whether one would consider staying or leaving a rural area. To some HRH working in a rural area translates to some savings due to unavailability of shopping malls and other recreational facilities. Rural allowance would also be considered extra income for those working in rural areas.

Working and living conditions. This is a very important component in the health professional’s decision to stay or leave a rural setting. Good management and supervision are very important as they give the workers a feeling of being wanted, respected and recognized, despite the challenges of being in a rural setting. There is also need to have adequate supplies and equipment, safety, and proper communication channels. Further, improving the living conditions which include infrastructure, housing, water and electricity all contribute to HRH decision to stay in a rural area.

Bonding factor, this determines if one is obligated to serve for a number of years as a result of conditional scholarship for instance. Most community service doctors are obligated to work in rural areas as a result of the conditional scholarships, which require them to come back and serve in their communities. Further, the doctors with foreign

qualifications are required to work for a couple of years in rural sector after recognition of their qualifications.

A good understanding of these factors, that influence the HRH to work in rural areas, would prompt policy makers to come up with policy initiatives that would enforce these factors.

2.2.3. Intervention strategies

The South African Government has come up with several policy initiatives and national strategies aimed at addressing the challenges faced by HRH working in the rural areas. These strategies aim to correct the imbalance of HRH between rural and urban areas, to increase the production and retention of workers, to improve the working conditions and remuneration packages of HRH in the public health sector. These strategies include a new Nursing Act (Act 33 of 2005) which introduces community service for professional nurses, the clinical associates programme and development of new qualifications under the South African qualifications authority (Lehmann, 2008). Further, strategies contained in the National HRH plan released in 2006 include modernization of tertiary hospital services, increased production of HRH, community service, recruitment of foreign doctors to work in under-served areas, provision of scarce skills and rural allowance, and the implementation of Occupational Specific Dispensation (OSD) (DoH., 2006). It is these strategies that this study reviews and these are detailed in the following section. This next section further reviews strategies adopted by other countries and reviewed in studies (Lehmann, 2008, de Vries and Reid, 2003, WHO, 2010) which may be of use in the South African context.

South African Adopted Intervention Strategies

Attracting health professionals in the rural areas has proven to be difficult over the years, which has seen the need to formulate strategies which would see more HRH attracted in rural areas. These strategies include the following:

Rural Allowance

The Rural Allowance was introduced by the government as a strategy to correct the imbalance in the distribution of HRH between the urban and rural areas. An initial rural allowance was introduced in 1994, which was only granted to doctors and dentists, and remained at a fixed rate for several years (Reid, 2004). However there wasn't enough evidence on the effectiveness of this strategy, and in March 2004, a new rural allowance scheme was implemented which consisted of two separate allowances: the Rural allowance and Scarce Skill Allowance. The allowance benefits most of the categories of HRH (doctors, dentists, dieticians, pharmacists, psychologists, radiographers, therapists, and professional nurses with a 4 year degree) that are located in health facilities designated as rural. However, the enrolled nurses (with 2 years training) and nursing assistants (1 year of training) were excluded from the allowance. The SSA on the other hand was designed to ensure that the country in the long run will attain enough capacity of HRH skills. The allowance benefits particular categories of HRH irrespective of where they are located (DoH., 2006). Table 9 shows the allocation of rural and scarce skill allowance components to the different health professional categories.

Table 9: Summary of the rural and scarce skill allowances, 2004

<i>Scarce skills allowance</i>	
<i>15% of basic Salary</i>	Medical and dental specialist, dentists, medical doctors, pharmacists, pharmacologists
<i>10% of basic salary</i>	Dental technicians, psychologists, dieticians and nutritionists, Occupational therapists, Physiotherapists, Radiographers, Speech therapists, Professional nurses with qualifications in: <ul style="list-style-type: none"> • Operating theatre technique • Critical care (intensive care) • Oncology
<i>Rural allowance</i>	Percentages
<i>ISRDS Nodes</i>	22% Doctors and Dentists 17% Therapists, Pharmacists, and Dental Technicians 12% Professional nurses
<i>PSCBC designated rural areas</i>	18% Doctors and dentists 12% Therapists, pharmacists and Dental technicians 8% Professional Nurses

<i>Other inhospitable areas</i>	To be determined by the provincial head of health, depending on availability of funds, from within provincial budgets.
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Source: Department of Health (2004)

In South Africa a study was conducted by Reid which sought to monitor the effect of the new rural allowance which was introduced by the government in 2004. The results of the study showed that financial incentives are just one of the factors that influence their decision to work in rural areas. The health professionals highlighted career development, job satisfaction, and educational opportunities as important factors which influences especially for the young professionals. According to the findings the initial rural allowance introduced in 1994 influenced approximately a third of the health professionals to work in the rural areas. Moreover, the implementation of the new rural allowance saw between 28% and 35% of the health professionals mostly nurses change their short term career plans (Reid, 2004). These findings however have been challenged by recent studies.

In addition, a study analyzing the implementation of rural allowance in North West province of South Africa showed that Reid’s study was conducted soon after rural allowance was implemented which meant that the HRH had just received their backdated pay outs which could have influenced the information they provided. The findings of the study show that there was a problem with the implementation of rural allowance which resulted in information gaps, uncertainty, and room for subjective interpretation. One major weakness with the implementation was lack of proper definition of the term “rural” which meant that the provincial health departments were left to make a decision as to what defined rural which resulted in discrepancies as to what rural was across the provinces. Additionally, remoteness of the setting wasn’t ascertained which meant that the HRH working in the deep rural were entitled to the same rural allowance as those in semi-rural. Thirdly, the implementation of rural allowance excluded the enrolled and the staff nurses. The study recommended that policy implementation required better coordination between the policy makers and the stakeholders which should be backed up by evidence to inform policy. Moreover, the study suggested attracting and retaining

HRH in the rural areas requires a combination of both financial incentives and non-financial incentives (Ditlopo et al., 2011).

Occupational Specific Dispensation for HRH

According to Mahlathi (2009), the objectives of OSD were: to improve the public services' ability to attract and retain employees; to provide differentiated remuneration dispensations for the vast number of occupations in public service; to cater for the unique needs of the different occupations; to provide a unique salary structure per occupation; to prescribe grading structures and job profiles to eliminate inter-provincial variations (thus, the OSD was developed to have a single salary structure for all professionals according to ranks, and not according to where they find themselves either in institutions or in provinces); to provide adequate and clear salary progression and career path opportunities based on competencies, experience and performance.

The government's intention with the OSD within the public health sector was to create one unique salary package structure per occupation and do away with the existing ranges of medical categories for medical professionals, which included a basic salary, 13th cheque, pension fund, medical aid, scarce skill allowances, commuted overtime and in some instances a rural allowance. The OSD remuneration for medical professionals and professional nurses employed in general nursing is as shown in the table 10 and 11 below.

Table 10: The OSD for medical professionals with percentage increases at year 1 and 2

Professional Category	Grade	Experience/ service	Salary Notch prior to OSD	Salary notch as at 1july 2009	Total salary package as at 1july 2009*	% increase Year 1	% Accumulative increase Year 2
Medical Intern			R117 501	R228 828	R314023	31%-53%	
Medical officer (Community service)			R174 243	R286 086	R392 599	9.8%- 18.9%	6.1%
Medical Officer	Grade 1	0-4 years	R174 243	R332 016	R365 217	9%- 25%	12%
	Grade 2	5-9 years	R247 512	R385 314	R423 846	26%- 44%	14%
	Grade 3	> 10 years	R391 026	R447 174	R491 892	46% - 68%	20%

Medical Specialist	Grade 1 Grade 2 Grade 3	0-4 years 5-9 years > 10 years			R491 892 R554 109 R624 198	1.8% - 18% 14.7%- 32.9% 29.2%-49.8%	13% 20% 26%
Principal Specialist			R769 271		R932399	4.6%- 25.1%	
Chief Specialist			R932 399		R1.2 million	7.9% -29%	

*figures represent the OSD remuneration packages after cost of living adjustments as at 1 July 2009.

Source: National Department of Health (2009); Mahlathi (2009)

Table 11: Remuneration for professional nurses employed in general nursing positions pre- and post-changes to the OSD, 2007- 2009.

Service/ experience	Revised production grade	Salary notches as at 1july 2007	Salary notches as at 1july 2008	Total salary packages as at 1july 2008	Salary notches as at 1 July 2009*	% increase in salary 07-08	% increase in salary 08-09
<4 years	Grade 1	R106 086	R117 225	R174 333	R130 119	10.5%	11%
5-9 years	Grade 1	R115 923	R124 365	R182 996	**		
10-19 years	Grade 2	R130 473	R144 174	R207 031	R160 032	10.5%	11%
20-29years	Grade 3	R160 470	R177 318	**	R195 936	10.5%	10.5
>30 years	Grade 3	R186 030	R205 563	R281 516	**		

*OSD for nursing profession taking into account cost of living adjustment. ** No data available.

Source: Department of Public Service and Administration (2008).

The implementation of OSD has been met with various criticisms. According to Fouche, the government's implementation of OSD sought to remunerate a nursing profession which is unskilled and incompetent. Fouche argues that implementation of Continuing Professional Development (CPD) - an initiative by the government aimed at continuously updating and mastering nursing and midwifery competencies - was overtaken by the introduction of OSD, an initiative meant to improve government's ability to attract and retain skilled employees through improved remuneration. Fouche further argues that considering CPD hadn't been effected which was aimed at improving the skills and competencies of nurses, there would be no quality assurance measures the government could use to justify future increments within the OSD structures, given that OSD is meant

to introduce revised salary structures that caters for among others; increased competencies and performance (Fouche, 2007).

On the other hand, according to the Rural Health Advocacy Program (RHAP), the outcome of the OSD negotiations for medical practitioners in 2009 was declared anti-rural by Rural Doctors Association of South Africa (RUDASA) who noted that OSD was structured as an incentive for specialization. Considering rural areas rely mostly on generalist doctors, it would mean that OSD would not benefit the doctors who were working in rural areas. This would translate into more shortages as the doctors in rural areas would prefer moving into urban areas where specialization was more prevalent (WHO, 2011).

In a recent study evaluating OSD with respect to policy implementation, Ditlopo (2013) highlights the challenges associated with implementation of OSD as: time and resources, dependency relationships, task specifications, communication and coordination of the process. OSD implementation took a decentralized approach which meant that the responsibilities were delegated from the national to provincial health departments, to districts and sub-districts and lastly to hospitals. This approach resulted in insufficient coordination among different stakeholders and variations in the implementation process which was mostly caused by insufficient communication between different levels of health departments. According to Ditlopo, improved communication between the different levels might have facilitated better implementation. Ditlopo further reiterates that the success of the implementation can be enforced by overcoming the weaknesses encountered during the implementation process. This can be achieved by proper planning and good management of the process, communication and coordination, following the guidelines of implementation, and consistency in monitoring and evaluation (Ditlopo et al., 2013).

Despite the challenges with implementation, the study by Ditlopo revealed positive attributes about OSD. The initiative was welcome by HRH interviewed who said that it was a good initiative by the government which was informed by challenges faced by

health professionals. Secondly, OSD attracted most of the HRH from private back to the public sector as it resulted in better pay than in the private sector. The HRH that didn't have any specialties were challenged to undertake them since OSD was mostly rewarding specialties (Ditlopo et al., 2013).

Community service for HRH

In South Africa, community service was first introduced in 1998 for all graduating doctors. Community service requires that the medical practitioners undertake one year of compulsory service in rural areas, after completing their studies at medical school (Reid and Conco, 1999). The initiative was aimed at alleviating the shortage of HRH in rural areas. Community service for nurses was introduced in 2008 which at the start saw 200 nurses deployed in rural areas (Lehmann, 2008). After one year of community service the health professionals indicated their intentions to work in the public sector declined from 50% at the beginning of community service to 35% at the end, with only 16% remaining in the health facility where they served (Day and Gray, 2008). A further 73.5% decrease in the number of doctors enrolling into community service was noted between 1999 and 2008 (1999- 1112; 2004 = 1128; 2008= 295). In 2008, a decrease of between 63.6% to 88% in the number of medical practitioners was experienced in every province other than Northern Cape. However, the number of pharmacists has increased since 2001 (406) to 457 in 2008 (Day and Gray, 2008).

The success of the implementation of community service is largely dependent on availability of supportive senior health professionals in rural health facilities. Lack of senior HRH results in medical practitioners decision to move out of the rural areas (Gerritsen, 2010). Hence, the WHO provides as one of their recommendations, which is also confirmed by RuDASA, the development of rural career paths and to design continuous professional development programmes accessible from the rural workplace (WHO, 2006a).

Recruitment of foreign doctors.

The DoH in South Africa has for a long time been recruiting foreign doctors to work in the country. However, in the past few years the numbers have declined and are due to reduce even more, due to the recent policies designed to restrict the foreign doctors from other African countries coming to work in the country (Breir, 2009). It's estimated that roughly 9.4% (3128) of HPCSA registrations in 2006 were foreign doctors. Considering the number of foreign qualifications registered, the figure would increase to 13.6% (4536). According to Bateman, in 2007 about 2000 foreign doctors were working in public sector (Bateman, 2007a). The South African Government came up with a policy which was outlined in the National HRH Plan. In the policy the government restricts health professionals coming from other developing countries from securing permanent employments in the country. The intention of this policy is to ensure that South Africa does not encourage the brain drain which is really affecting other developing countries. However, according to the policy, South African government encourages government-to-government agreements in contracting foreign skills for the public health sector. According to the National HRH Plan, the policy for recruitment of foreign health professionals includes the following:

1. Foreign recruitment of health professionals shall preferably be done through government – to government agreements.
2. No active recruitment for permanent employment in SA will be directed at other developing countries in the African region.
3. The exchange or replacement for education and training purposes will be done in such a way as not to disadvantage any South Africans.
4. In each health professional category, the proportion of total foreign workforce should not exceed 5%.
5. Employment contracts offered to foreign health professionals shall not be more than 5 years.
6. Employment contracts will be with the respective provinces rather than the health facilities, but the responsibility to manage the situation will be delegated to the health facility.

7. Employment contracts shall be non-renewable in line with existing policy.
8. The statutory Health Professional councils shall play a major role in the assessment of academic training programmes at the institutions of countries that offer health professionals to South Africa.
9. The Department of Home Affairs at national levels shall be an active partner to ensure that work permits are issued timeously to successful candidates.
10. Provincial Department of Health shall engage in the recruitment of foreign health professionals through the National Department of Health.
11. In cases where a government-to-government agreement or memorandum of understanding does not exist and the foreign health professional possesses skills that are urgently needed, an application for support regarding employment shall be referred for consideration to the national Department of Health.
12. Foreign health professionals who do not enjoy permanent resident status shall be permitted to enter private practice, in whichever health professional category (DoH., 2006).

One policy implication in this regard is that the Department of Health would have to scale down on the number of foreign health doctors in South Africa to 1661 (using 2006 figures), considering the proportion of total foreign workforce should not exceed 5% in each category. This implies a loss of between 1467 and 2875 foreign doctors (Breir, 2009). Considering some of these doctors work in rural areas, the rural health care services would be greatly affected. According to (Breier, 2009), against a total of 9527 doctors in public service in 2006, a cut of 2875 would mean a loss of 30%.

An agreement was reached between the South African government and the government of Cuba to admit Cuban doctors to South Africa. The first group arrived in 1996 at the request of Nelson Mandela, the South African President at the time. A further 11 Cuban medical academics arrived in the country in 1997 (Breir, 2009). The numbers increased over the years, to about 400 and 35 medical lecturers, but these numbers have been reducing over time. In 2005, there were 168 doctors and 26 lecturers in the programme. According to Couper, de Villiers, and Sondzana (2005), lack of replacing the Cuban

doctors has had an adverse effect on district hospitals in rural areas and regional hospitals. In 2004, the South African Government concluded an agreement with Iran, which saw Iranian doctors work in rural South Africa (Couper and Hugo, 2005). In August 2006, the DoH deployed 36 experienced Iranian doctors to hospitals which were in need of doctors such as Limpopo, the North West, and Mpumalanga. There is no recent feedback however, on the agreement performance. There are also reports that the South African Government has put out requests to Russia and Bulgaria (Bateman, 2007a). In May 2007, an agreement was reached with the Tunisian government to allow doctors to come and work in the country, which saw two ophthalmologists deployed in the Eastern Cape who played a role in conducting 198 cataract operations. By the beginning of 2008, there were 22 Tunisian doctors working in the Eastern Cape, Northern Cape and Free State provinces.

One of the agencies that have been active in recruitment of foreign health professionals is African Health Placements (AHP). Since its inception in 2005, AHP has recruited and positioned more than 2500 foreign qualified doctors and other local health professionals in the rural clinics and hospitals. AHP is a recruitment organization working to improve healthcare delivery in Africa through the recruitment and placement of health professionals. In South Africa AHP is involved in conducting recruitment of South African HRH from private into public health care facilities, as well as foreign doctors and nurses into rural health facilities throughout South Africa. AHP has also been helpful by getting in touch with South African HRH overseas and assisting them to return to South Africa. This initiative is being undertaken in collaboration with the Homecoming Revolution, an NGO that was established with an intention of encouraging and facilitating the return of South Africans who had emigrated. Further, AHP is in partnership with the London GP Deanery's Out-of-Programme Experience (OOPE), a programme that assists UK medical doctors to come to South Africa on an annual basis to have one year's work experience in rural health facilities in KwaZulu-Natal. AHP has managed to undertake its administrative process swiftly as a result of having positioned some of its staff in the DoH and the Health Professionals Council (AHP: www.ahp.org.za).

The table below outlines a summary of the strategies that the South Africa government has come up with to address unequal distribution of HRH between rural and urban areas.

Table 12: policy initiatives to address mal-distribution between rural and urban settings in South Africa

Year	Policy initiative
1996	Government initiated recruitment of foreign doctors – By recruiting the first group of Cuban doctors and initiated training of medical doctors in Cuba.
1997	Government released white paper for the transformation of the health system, containing information on equitable health professional distribution.
1998	Government introduced community service for doctors and allied health professionals, making it mandatory for HRH to work in underserved areas for a 1 year period.
2004	<p>Government introduced Rural Allowance to attract and retain HRH in rural facilities.</p> <p>Government introduced Scarce Skills Allowance to attract and retain certain categories of health professionals in the public sector.</p> <p>Government released a policy on the recruitment of foreign health professionals restricting recruitment to persons with verified qualifications and competencies to work in underserved areas.</p> <p>Government finalized a bilateral agreement with Iran to allow Iranian doctors to work in rural South African health facilities.</p>
2005	Government promulgated the National Health Act No 61 Of 2003 with a certificate of need provision for health professionals wishing to establish a private practice to decrease the concentration of health professionals in urban areas. This clause has never been enacted.
2005	Commonwealth Ministers of Health signed an agreement regarding the ethical recruitment of health workers.
2006	<p>Government released a National Human Resources for Health Framework to address the critical shortage of health professionals.</p> <p>Activists developed a Draft Rural Health Strategy for South</p>

	Africa to improve health services in rural areas in the period 2006-2009.
2007	Government signed an agreement to allow recruitment of Tunisian medical practitioners for temporary employment in the rural areas.
2008	Government released a National Nursing Strategy for South Africa
2008-2010	Government introduces Occupational Specific Dispensation i.e. salary categories specific to each occupational category in the health sector.
2010	World Health Organization launched a set of recommendations on increasing access to health workers in remote and rural areas through improved retention.

Source: Ditlopo, et al 2013

Other attraction and retention strategies

Recruitment and training for rural practice

This can be achieved by targeted recruitment and preferential selection of students from rural areas. There is sufficient evidence that this results in the students choosing to go back and work in their rural areas. De Vries et al. conducted a study with final year students of all eight South African Medical schools to ascertain their career plans and influences on those plans. The study suggested that selection policies favouring students of rural origin had a positive effect on the recruitment and retention of doctors in rural areas (de Vries et al., 2010). According to the study, students from the rural areas or small towns (N=350), were less likely than those from the urban areas (N=376) to migrate overseas. Several studies conducted in the USA have shown that students with a rural origin continue to work in rural areas for an average of 11-16 years after completion of their studies (Halaas, 2008). In South Africa, the students with a rural background are three times more likely to work in rural areas compared to students from urban areas (de Vries and Reid, 2003). Furthermore, the location of training is very important and this could be done by locating training schools, including medical schools, in rural areas, as this would increase the chances of students working in the rural areas. The content of training programmes should be reviewed to include rural health issues, as well as

providing opportunities for career development. The success of this strategy has been evident in Thailand where they have used targeted recruitment together with rural location of training, which has seen the health professionals well equipped, prepared and licensed to work in rural areas (Nitayarumphong et al., 2000, Wibulpolprasert, 2003). In Africa, a number of countries have embraced the strategy. These include Ghana, Kenya and Ethiopia (Dovlo, 2002).

The use of incentives and other strategies (Bundle strategy)

The use of incentives and compulsory service, have been used widely as a strategy to address staff shortage in rural areas. For instance the Indonesian Government used a combination of community service, preferential access to training and financial incentives for HRH working in rural areas. The doctors deployed in rural areas earn double the salary of those working in urban areas (Chomitz, 1997). In Thailand, the medical students receive heavily subsidized tuition, free clothing, room and board, and learning materials in the course of their studies with a condition of compulsory service in the rural areas after completing their studies (Nitayarumphong et al., 2000, Wibulpolprasert, 2003). Furthermore, Zambia offers as a way of attracting and retaining health professionals in rural areas, a 30% rural allowance, renovation of their housing, school fee subsidies, car and house loans, training and career development opportunities (Koot and Martineau, 2005).

Rural Scholarship Schemes

Rural scholarship is one way of overcoming staff shortages in rural areas. The scholarships afford opportunities to students who could not afford their studies, by offering them bursaries but with a condition to come and back and serve in their communities. According to Ross and Coupe, (2004) these include:

Umtombo/ FOMSS: The Friends of Mosvold scholarship scheme (FOMSS), is a locally based scholarship scheme at Ingwavuma, Northern KwaZulu Natal. This scheme acts as a link between the local communities, schools, health care providers and provincial bursary

funds in-order to ensure that local students are trained and developed as a way of overcoming the HRH shortages in the area. FOMSS was established in 1998 with an intention of developing the local students who would then return back home and serve their communities. The criteria used to select the students for a FOMSS requires the students to be from the Mosvold sub-district, be accepted at a tertiary institution to study in a health science field, be selected by a local selection committee, do two weeks voluntary work at the hospital prior to selection and sign a year-for-year work- back commitment to Mosvold Hospital. Further, the students selected are expected to participate in the Medical Education for South African Blacks (MESAB) mentoring programme, report regularly to their coordinator at Mosvold Hospital, work for four weeks per year at Mosvold Hospital, run an outreach programme at their own school, teaching about HIV/AIDS and the need to remain in the area (Ross and Couper, 2004).

Wits Initiative for Rural Health Education (WIRHE):

The WIRHE is another rural scholarship initiative which was established in 2002, with an intention of providing local based scholarship programmes in different provinces, just like the FOMSS. In Limpopo, the initiative works with the Friends of Tintswalo Trust in the Botshabelo District. In North-West province, the initiative works with the District Health Management Team of Bophirima District, which is based in Vryburg (Ross and Couper, 2004). It is hoped that proper execution and implementation of the rural scholarships would see the challenges of staff shortages resolved in these rural areas.

The WHO came up with the following recommendations to assist policy makers in formulation of policies aimed at retaining HRH in rural areas. These recommendations are categorized into Educational, Regulatory, Financial, and Personal and Professional support. Table 13 below summarizes the recommendations within the South African Context (WHO, 2011).

Table 13: Summary of recommendations: The WHO Global Policy on increased access to Health workers in remote and rural areas though improved retention: The South African Context.

Category	Recommendation by WHO	Done in SA?	Outputs Achieved?	Specific SA Recommendations	SA examples
EDUCATIONAL	Targeted admission policies	Yes	Limited	<ul style="list-style-type: none"> -Support programmes to help potential rural high school students of disadvantages backgrounds meeting entry requirements - Rural intent to be part of university selection criterion - Rural origin to be considered favourable selection criterion 	<ul style="list-style-type: none"> - WSU: looks at rural origin/rural intent of candidate students - Medunsa: known to provide lot of mentoring and support - Umthombo Youth Foundation, KZN: rural bursaries for health science training - Wits WIRHE: bursary programmes for rural students, Rural Careers Days (target Grade (10-12)
	Location of undergraduate clinical training outside of major cities	Yes	Limited	<ul style="list-style-type: none"> - Support to and expansion of District Education Campuses - Re-opening and support to nursing schools in rural areas to be prioritized 	<ul style="list-style-type: none"> - Lehurutshe and Kopanong District Education Campuses (University of Witwatersrand) - Ukwanda Rural Clinical School (University of Stellenbosch) - Mpumalanga Health Sciences College (University of Pretoria)
	Exposure of students to rural clinical experience	Yes	Limited	<ul style="list-style-type: none"> -Rural rotation to be integrated into the mainstream training programmes across health disciplines, including e.g. dentistry and pharmacy 	<ul style="list-style-type: none"> US – Worcester, Hermanus, Paarl, Madwaleni hospital in EC Wits – Tintswalo (Mpumalanga), Mafikeng, Taung, Zeerust (examples in North West), Kopanong (Gauteng), 2-wk rural public health block in 5th yr, Integrated Primary Care(IPC) block for final-yr

					<p>medical students; occupational therapy: 3 rural placements (2 in Limpopo, 1 in Mpumalanga, physiotherapy: 3 rural placements in Limpopo</p> <p>UCT – Vredenburg rural site, Rural Student Network UP – district block rotation for medical students WSU – rural blocks at St Barnabas, Holy Cross hospitals Nursing and pharmacy students from different faculties rotate as resources assisting on the Phelophepa Health Train</p>
	Revise curricula for rurally relevant issues	Yes	Limited	Specialist qualifications to include a rural rotation to instil the principle of outreach support	<p>US undergrad medicine – full 5th yr spent at Ukwanda Rural Clinical School UP – longitudinal PHC exposure in successive training blocks Wits – Community-oriented Primary Care (COPC) / “Adopt a community” in 3rd/4th yr; Occupational Therapy: comprehensive community appraisal; Physiotherapy: design of community-based management programmes</p>
	Continuing education programmes accessible from place of work/home	Yes	Limited	Online distance-based education courses to be more broadly offered, Specialist outreach from regional hospitals to support course learning	<p>- MMed (FamMed) and College of Medicine of South Africa (CMSA) Diplomas - Effective Management and Leadership Courses in EC - Africa Health Placements programme supporting rural CPD sessions in Eastern Cape</p>

					<ul style="list-style-type: none"> - UCT/UWC long distance Perinatal Education Programme with rural study groups - Foundation for Professional Development courses in rural areas
REGULATORY	Enhanced scope of practice to increase the potential for job satisfaction	No	Limited	<ul style="list-style-type: none"> - Rural health teams need multi-skilled generalists - Training to enhance scope of practice should be rural-friendly: brief and locally based - Pharmacy assistants increased scope of practice 	<p>Nurse Initiation Management of ART growing nationwide, but any such changes are disease-specific; strategy should be focused on job Descriptions/competencies; multidisciplinary synergistic approach</p>
	Introduce different types of health workers with training for rural practice	No	N/A	<ul style="list-style-type: none"> - Enhance the understanding in academic and policy domains that the rural skills mix is different from the urban skills mix - Expand clinical associates training output - Accelerate staff nursing training output - Accelerate pharmacy assistant output 	<p>Clinical associates training at Wits, UP, WSU</p>
	Ensure compulsory service requirements with appropriate support and incentives	Yes	Limited	<ul style="list-style-type: none"> - Effectiveness of current CSMO policies and practices to be reviewed and National and Provinces to adopt rural-biased CSMO policies with norms for rural placements - Community 	<p>KZN DoH has adopted a best practice rural friendly CSMO policy. Critical elements of the policy are:</p> <ul style="list-style-type: none"> - Rural underserved areas to be favoured - Supervisors to be appointed at facility level - Accommodation to be provided - Outreach, under supervision, from district

				service to include clinical associates	hospitals to be conducted - CSMO policies for rehabilitation personnel are rural-friendly
	Provide scholarships and financial incentives in exchange of return of service	Yes	To some extent	- Expand and ensure provincial capacity to enforce “exchange of service”	Limited provincial and military bursaries Provided
FINANCIAL	Use a combination of sustainable financial incentives to improve rural retention	Yes	Limited	- Rural careers to be incentivised by OSD as opposed to rewarding urban-based specialization - Rural Allowance to be reviewed to reward work in inhospitable areas - Provide Sabbatical Leave for rural health care workers as a retention tool	OSD declared anti-rural by RuDASA and RHAP
	Provide a safe and supportive working environment	Yes	Limited	- Provide adequate equipment - Provide accommodation to health care workers and students in rural areas - Recruit health leaders, e.g. hospital CEOs on basis of skills and experience to ensure supportive work environment -HR Norms to be implemented for equitable distribution of scarce HRH and to ensure senior support to CSMOs. -Appointment	-AHP proposal public-private sector accommodation project - NWDoH MOA with Wits for student accommodation - AHP Rural Doctors Support Programme in EC (District Practice Managers visits to hospitals)

PROFESSIONAL/ PERSONNAL SUPPORT				moratoriums to be banned in places that do not meet the minimal norm	
	Implement outreach support activities from better-served areas	Yes	Limited	Outreach guidelines to be implemented across levels from tertiary to community health to ensure supervisory support, e.g. NIMART trained nurses - Introduce cell phone policy: 24hours access to rotating specialists by district hospital teams	-Best practice examples in different provinces, but not done routinely - Long history of Wits outreach to Tintswalo (in the past) - Wits-specialists going out to Klerksdorp-Tshepong (KT) Hospital Complex on a regular basis
	Develop and support career development programmes	No	N/A	- Introduce policy to earn points for years worked in rural areas when applying for registrar and or training opportunities	-Weak HR systems, no government ownership - Planned strategy in EC: minimum of 3 years work in rural area earns preference for registrar post - Wits registrars (range of specialist disciplines) rotate through KT
	Support the development of professional networks	Yes	Limited	As Global WHO recommendation	Very useful web-based list serves build network around management of clinical cases presented (e.g. paed's HIV, ethics), no rural focus - RuDASA and RHAP facilitate the growth of professional networks in rural areas
	Adopt public health recognition measures such as rural health days, awards and titles at local, national and	Yes	Limited	As Global WHO recommendation -	The Discovery Foundation has 5 yr history of providing this recognition (not only rural) RuDASA rural doctor of the year award

	international level				
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Source: RHAP and Partners, 2011

2.3. Theoretical framework

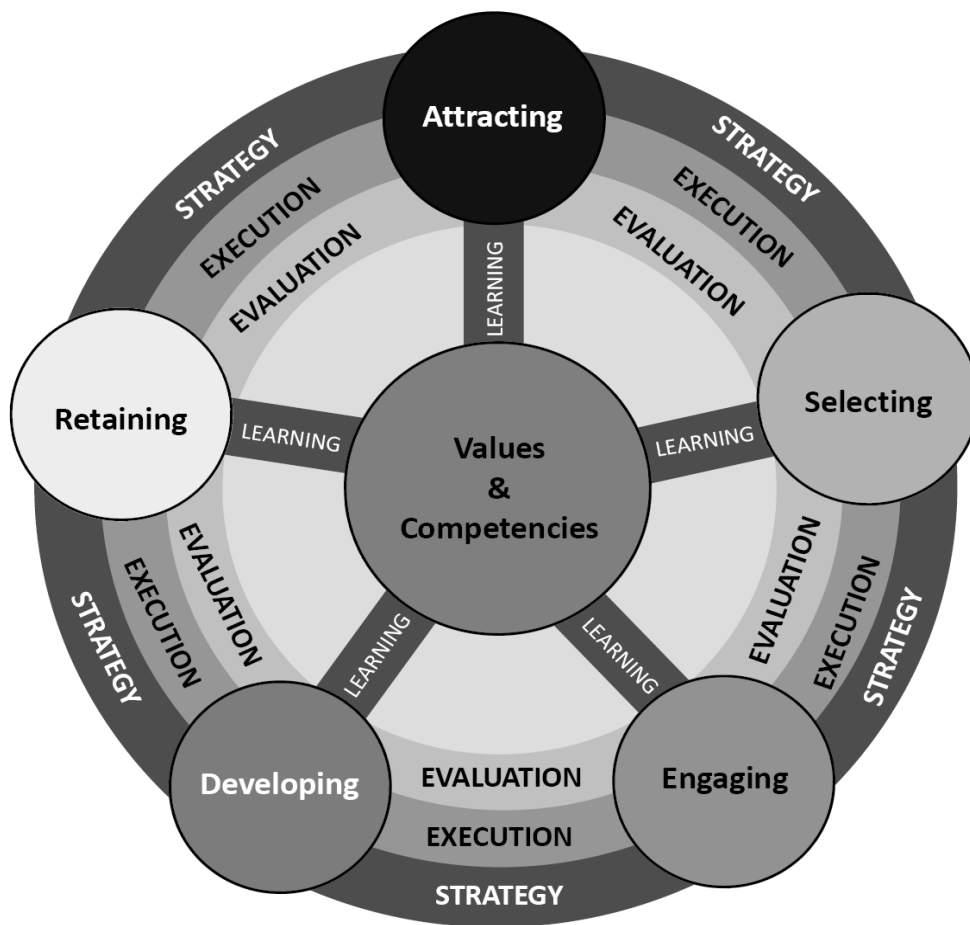
This study is based on a talent management theoretical framework (Strategic framework for success, 2010) (Phillips and Addicks, 2010). Previous studies have shown the need of talent management in attracting and retaining human resources in organizations. According to Hiltrop, high performance organizations are outperforming their competitors based on the strategies put in place to attract and retain talent. These include teamwork and openness between co-workers, training and development and the degree of proactivity in HR planning (Hiltrop, 1999). Furthermore, Neal and Gebauer shows how dynamics in the organizations are changing over the years, which have contributed to shortages in certain professions and hence the need to employ talent management strategies in the 21st century to ensure that the organizations are attracting and retaining skilled workers. They identified these strategies (top drivers) in attracting, retaining and engaging talent as competitive base pay, career advancement opportunities, learning and development opportunities, and good supervision and management (Neal and Gebauer, 2006).

2.3.1. Talent management

“A talented person has a certain aura in their ability that others wish to emulate and from which lesser mortals draw inspiration (Thorne and Pellant, 2007)”. HRH working in rural areas clearly depict this from their tireless efforts to ensure continued high quality healthcare despite the challenges they have to deal with on a daily basis. They are a scarce resource, a talent that needs to be nurtured and managed. This management of a scarce resource can only be successful by engaging with individuals and by affirming the health care sectors’ visions and values. Further, the talent can be developed by creating a culture based on shared values and beliefs where the thoughts, feelings and emotions are engaged and the leadership demonstrates commitment through its behaviour and attitudes. “Talent management in the health care sector can be defined as the process of

attracting skilled human resources for health, of retaining current and new employees, and developing and retaining employees to meet current and future health care needs”. Talent management reflects how the HR component has evolved over time, from just being an administrative overhead to a continuous process that delivers an optimal workforce, in this case, the health care sector. Managing this scarce resource would require a strategic approach in sourcing, attracting, selecting, training, developing, and retaining the health care worker (Lockwood, 2006).

Figure 2: An Integrated Talent management Framework



Source: strategic framework for success 2010

The talent management framework above is broken down into five categories attracting, selecting, engaging, developing and retaining strategies as described below:

- Attracting

There is a challenge of attracting HRH to rural areas. One way of attracting this scarce resource would be to offer competitive compensation packages which include better benefits. Hence government's intervention through the implementation of the Occupation Specific Dispensation (OSD) which includes rural and scarce skill allowances for those working in underserved areas.

- Selecting

Considering not many HRH are keen to work in the underserved areas, the selection process is not easy, and most of the program managers find this to be an ongoing process, as most doctors and nurses work for a short time and then migrate to urban areas. This has resulted in outsourcing talent from overseas by recruitment of skilled foreign health professionals to work in underserved areas.

- Engaging

Having attracted and selected skilled HRH, the next step involves engaging them. Compensation packages and benefits are not enough to retain workers. There's a need for management support and supervision which ensures proper communication channels are in place for workers to voice their opinions, express their dissatisfaction, and give and receive overall feedback on a continuous basis. Engaged employees demonstrate qualities like innovation and creativity, take initiative to make things happen and have an emotional attachment to the job (Wagner and Harter, 2006).

- Developing

There is a need for continuous skill enhancement for the HRH, which includes education and professional development programmes designed to meet the needs of workers. There are eight medical schools and 401 nursing institutions in South Africa. This provides an opportunity for career development, for example, to enrolled nurses and nursing assistants who wish to become professional nurses. The availability of such programmes

within the vicinity of their work stations may also support their motivation and hence retention.

- Retaining

Retention of this scarce resource is the ultimate outcome. The national strategies are aimed at addressing the challenges that are faced by HRH working in the rural areas in order to ensure their retention. This may include providing better working and living conditions, infrastructure, equipment and supplies, support groups to avoid the feeling of isolation among others.

2.4. Conclusion

An indepth literature search was conducted on the topic from the texts, journals and other publications from established authors who have sound knowledge on the scope of HRH with respect to attraction and retention strategies. The literature review presents background information on the challenges encountered by HRH in the rural areas, the attraction and retention policy initiatives both in South Africa and around the world. Moreover, the talent management theoretical framework adopted for the purposes of the study is discussed in detail.

One of the limitations is that there are very few evidence based studies that have looked specifically at the challenges facing HRH in rural areas and at how national strategies are impacting on the challenges of HRH in rural areas. Hence the literature discussed in this second chapter was only based on the few studies available. Chapter three presents the research methodology adopted for the current study.

CHAPTER 3 - RESEARCH DESIGN

3.0. Introduction

This chapter outlines the research design of the study. It entails a detailed research methodology, the different research techniques/methods with their advantages and disadvantages. Additionally, it contains the research methods adopted for this study and the reasons for this choice. Further, it details a description of the study setting, sample selection and size, data collection and analysis, and validity and reliability of data.

3.1. Research Methodology/Design

The research design is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of research. In developing a research design for this study, the researcher had to take into account the following: the purpose of the study, the theoretical framework informing the study, the context within which the study is being carried out, and the research methods to be used in collecting and analyzing the data. The purpose of a research project is depicted in the types of conclusions the researcher intends to draw. There are three different ways in which types of research have been distinguished which include: exploratory versus descriptive research, applied versus basic research, and qualitative versus quantitative research (Blanche et al., 2007).

3.1.1. Quantitative versus Qualitative research

Quantitative research is an enquiry into an identified problem based on testing a theory, measured with numbers, and is analyzed using statistical techniques. The aim of quantitative methods is to identify whether the predictive generalizations of a theory holds true (Creswell, 1994).

A qualitative research on the other hand can be defined as an investigative methodology described as ethnographic, naturalistic, anthropological, or participant observer research. A qualitative research emphasizes the importance of looking at variables in the natural

setting in which they are found. Detailed data is gathered through open-ended questions that provide direct quotations and the interviewer is an integral part of the investigation (Key, 1997).

Quantitative research methods

A quantitative research design can be categorized as experiments, surveys and content analysis. This can be further broken into three sub-categories including experimental, quasi-experimental, and non-experimental research. The experimental design uses the independent variable to measure and sometimes predict the outcome on another variable known as dependent variable. The quasi-experimental design on the other hand consists of the non-equivalent control group design and the interrupted time-series design. Lastly, the non-experimental research design makes use of correlation design, criterion-group design and cross-sectional designs which involves measurements at a single time (Welman et al., 2005).

Advantages of quantitative research study:

1. A quantitative research allows the researcher to measure and analyze data hence the results are statistically reliable.
2. The researcher is more objective in the findings of the study since the relationship between variables is studied in detail.
3. The research method can be used to test hypothesis in experiments because of its ability to measure data using statistics.
4. The results of the quantitative study are projectable to the population (Nykiel, 2007).

Disadvantages of a quantitative research study:

1. One main disadvantages of quantitative study is that the context of the study is ignored.
2. It doesn't study things in a natural setting.
3. A quantitative study involves studying a large sample of population.

4. A qualitative research measures the issues which are known prior to the onset of the study being conducted (Nykiel, 2007).

Qualitative research methods

A qualitative research design differs inherently from that of quantitative design in that it doesn't provide the researcher with a step-by-step plan to follow. In his book *Research at Grassroots* de Vos, states that... "In quantitative research the design determines the researcher's choices and actions, while in qualitative research the researcher's choices and actions will determine the design or strategy". Qualitative research enables the researchers to create a research strategy which is most suited for their study, or alternatively design the study around the strategy selected (de Vos et al., 2005).

Qualitative research consists of the following study designs:

1. Case study
2. Participant observation
3. Focus groups
4. In-depth Interviews

A Case study refers to a research design which pertains to the fact that a limited number of units of analysis are studied intensely. The units of analysis consist of individuals, groups and institutions, and they can be either typical or atypical. This implies that in a case where a single individual is studied in a case study, he or she should be highly representative of a particular population. On the other hand, such an individual should be extremely atypical of the phenomena being studied. A case study cannot be both typical and atypical it has to be either (Welman et al., 2005). Participant observation on the other hand requires the researcher to, for an extensive period of time, take part in, report, on the daily experiences of the members of a group, community or organization, or the people involved in a process or event or whatever is the unit of study. The researcher has to become part and parcel of the experiences, he has to integrate himself and become a member of the inner circle of the group that is being researched on. Thirdly, focus group can also be defined as in-depth interviews. The groups consist of a small number of individuals or interviewees that come together with an intention of expressing their views

on a specific set of questions. The purpose of focus group is primarily to collect qualitative data that might not be collected easily by means of individual interviews. Finally, the in-depth interviews are used in explorative research with the following aims; to identify important variables in a particular area, to formulate penetrating questions on the variables, and to generate hypothesis for further investigation. In-depth interviews can further be classified into unstructured and semi-structured interviews. Semi-structured interviews help the researcher gain detailed information about the beliefs about, or perceptions, or accounts of, a particular topic. The method gives the researcher much more flexibility. The researcher is able to follow through the interesting dimensions revealed by the respondents. Semi-structured interviews require the interviewer to have a set of pre-determined questions on an interview schedule. However, the interview is guided by the schedule rather than be dictated by it. During a semi-structured interview the respondent shares more closely in the direction of the interview and is free to introduce some thoughts to the researcher related to the questions being asked. Hence the relationship harnessed by the interview makes the respondent be perceived as an expert on the study and should therefore be given sufficient time to elaborate their thoughts (Smith et al., 1995).

Advantages of qualitative research:

1. The research method doesn't need a strict design plan at the onset; hence it gives the researcher leeway to make it unfold more naturally.
2. A qualitative research produces more in-depth, comprehensive information or visual evidence for instance photographs.
3. It uses subjective information and participant observation to describe the context, or natural setting, of the variables under consideration as well as interactions of the different variables in the context. It seeks a wide understanding of the context (Key, 1997).

Disadvantages of qualitative research:

1. The very subjectivity of the inquiry leads to difficulties in establishing the reliability and validity of the approaches and information.

2. It's very difficult to prevent or detect the researcher induced bias, since the researcher interprets data according to his or her own view.
3. Its scope is limited due to the indepth, comprehensive data gathering approach (Key, 1997).

Qualitative and quantitative research has some distinct characteristics as summarized in table 14 below.

Table 14: Summary of the Qualitative Versus Quantitative research

Criteria	Qualitative Research	Quantitative Research
Purpose	To understand & interpret social interactions.	To test hypotheses, look at cause & effect, & make predictions.
Group Studied	Smaller & not randomly selected.	Larger & randomly selected.
Variables	Study of the whole, not variables.	Specific variables studied
Type of Data Collected	Words, images, or objects.	Numbers and statistics.
Form of Data Collected	Qualitative data such as open- ended responses, interviews, participant observations, field notes, & reflections.	Quantitative data based on precise measurements using structured & validated data-collection instruments.
Type of Data Analysis	Identify patterns, features, themes.	Identify statistical relationships.
Objectivity and Subjectivity	Subjectivity is expected.	Objectivity is critical.
Role of Researcher	Researcher & their biases may be known to participants in the study, & participant characteristics may be known to the researcher.	Researcher & their biases are not known to participants in the study, & participant characteristics are deliberately hidden from the researcher (double blind studies).
Results	Particular or specialized findings that is less generalizable.	Generalizable findings that can be applied to other populations.
Scientific Method	Exploratory or bottom-up: the researcher generates a new hypothesis and theory from the data collected.	Confirmatory or top-down: the researcher tests the hypothesis and theory with the data.
View of Human Behavior	Dynamic, situational, social, & personal.	Regular & predictable.
Most Common Research Objectives	Explore, discover, & construct.	Describe, explain, & predict.
Focus	Wide-angle lens; examines the breadth & depth of phenomena.	Narrow-angle lens; tests a specific hypotheses.
Nature of Observation	Study behavior in a natural environment.	Study behavior under controlled conditions; isolate causal effects.
Nature of Reality	Multiple realities; subjective.	Single reality; objective.
Final Report	Narrative report with contextual description & direct quotations from research participants.	Statistical report with correlations, comparisons of means, & statistical significance of findings.

Source: (Johnson and Christensen, 2008); (Lichtman, 2006)

3.1.2. Nature of the study

A qualitative approach was used for this study as it provided rich and in-depth explorations and written descriptions which would result in sufficient detail to describe the extent of the challenges facing HRH in rural KZN and how adequately the national strategies are in addressing this problem.

3.1.3 Setting

The study was conducted in the Hlabisa sub-district of Umkhanyakude district, which is located in northern KwaZulu-Natal with a population of approximately 228 000 (Houlihan et al., 2011). There are 17 primary health care clinics (PHC) and the local 250-bed district hospital. The area is predominantly rural and the main sources of income are waged employment and state pensions. About 62% of people have access to electricity and 77 % to piped water (not necessarily in their homesteads) (Houlihan et al., 2011). Hlabisa sub-district was chosen because it is among the areas with the highest HIV prevalence in KZN province. In light of HRH shortages in rural areas, the study sought to determine how the high disease burden would impact on this shortage and consequently how the national strategies would help in alleviating the challenges faced by HRH working in such a setting.

3.1.4. Sample

The research consists of inferring things about a broader category of people or things from observations of a smaller sub-section of that category. These inferences are made possible by use of various qualitative methods which are used to select the cases to be observed. This process of selecting cases is referred to as sampling (Blanche et al., 2007). A research problem relates to a specific population and the population encompasses the total collection of the elements about which the researcher wishes to make specific conclusions. The population is the study object and in this case consists of HRH and events or conditions to which they are exposed to, which for the purposes of this study would be the challenges they are faced with as they work in rural KwaZulu-Natal. Due to the wide geographical distribution of clinics, Cluster sampling was used to divide 17 clinics into 3 clusters. Random sampling was then used to select two clinics from each cluster to be used in the study. The sampling entailed three main stages:

1. Choosing the cluster grouping
2. Numbering each cluster with a unique number i.e. A, B,C
3. Selecting the sample using simple random sampling.

Figure 3: Cluster samples

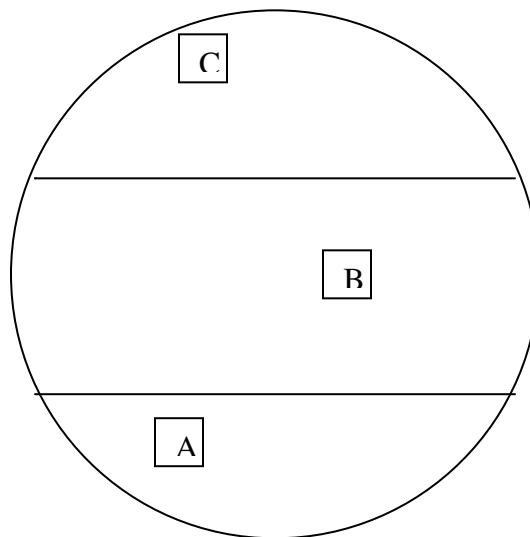
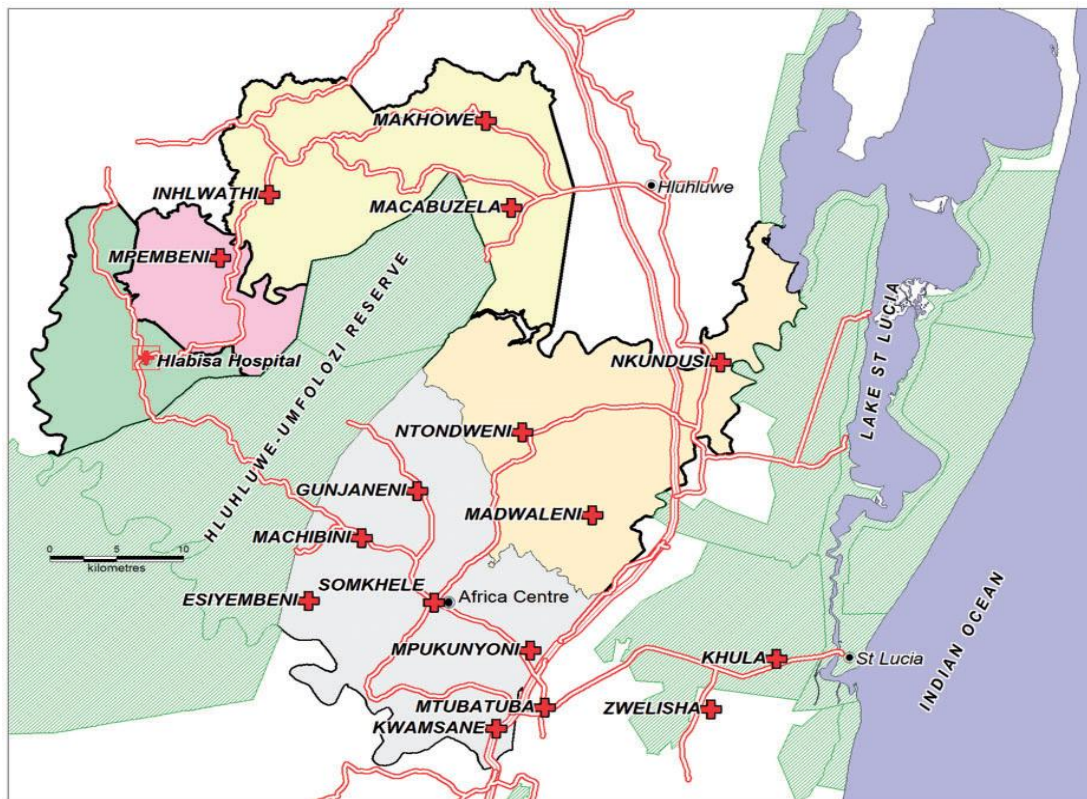


Table 15: Distribution of HRH by cluster

Cluster	A	B	C	Total
Professional Nurse	5	4	2	11
Staff Nurse	2	1	1	4
Doctors	2	1	1	4
Foreign doctors	1	1	1	3
Community service doctors	-	-	3	3
Total				25

Figure 3 above represents the cluster samples A, B, and C as derived from the map below (figure 4) while table 15 shows how the HRH are distributed per cluster. The community service doctors only appear in one cluster (C) because they are based in the hospital and only dispatched from there to PHCs. The interviews with the community service doctors were conducted at the hospital. The interviewer conducted a comparison of the responses from the different HRH categories and clusters in-order to establish commonalities or differences of the responses amongst the groups. This was aimed at ensuring representation of sample.

Figure 4: Geographical distribution of the clinics within the sub-district.



Source: Houlihan et al. IJE 2010

Advantages of In-depth interviews:

1. Ensures considerable input from each respondent.
2. An independent view is obtained on the situation.
3. Respondents are able to communicate freely.

4. There is no peer-group pressure that generates fear.
5. Allows rapport to build between the respondent and interviewer.
6. Allows the interviewer to see surrounding e.g. office or home of the respondent.

Disadvantages of In-depth Interviews:

1. It's more expensive and time consuming to carry out all interviews.
2. Data analysis is both expensive and time consuming.
3. There may be possible interruptions during interviews.

Overcoming Disadvantages of In-depth interviews:

The Cluster sampling method used assisted the researcher to conduct the study within 17 PHCs which are sparsely distributed over a wide geographical area, by dividing the clinics into 3 clusters and then randomly selecting 2 clinics out of each cluster. This significantly reduced the time and the cost that would have been spent in all 17 clinics. Interview appointments were booked in advance with the respondents hence they reserved some private time to avoid interruptions during the interviews.

3.1.5. Data collection

Ethical approval for this study was obtained from the Ethics committee of University of KwaZulu-Natal, faculty of Human and Social Sciences. Furthermore, the gatekeepers' letters written and signed by the supervisor were issued to Hlabisa sub-district HIV/AIDS health Program managers and the Hlabisa sub-district hospital management seeking permission to conduct the interviews in the clinics with the relevant staff members. After approval, the selected clinics were visited and the HRH (nurses and doctors) were informed of the objectives of the study. Upon consent, appointments were obtained for face-to-face in-depth interviews.

The respondents were informed that their participation was voluntary, and that the information provided would be confidential by not revealing names or identity of the clinics. They were also assured of the right to withdraw from participating in the study at any time. At the onset of each interview, the respondent was requested to sign the letter of consent. Individual interviews were conducted, using interview schedule

questionnaires, in the clinics, among 25 HRH. The researcher conducted all the interviews with the respective individuals behind closed doors to ensure privacy. The assurance given to the respondents of confidentiality set the respondents at ease and made it possible to conduct the in-depth interviews.

The interview schedule was a semi-structured questionnaire which was formulated by organizing questions into relevant themes, informed by literature with the theoretical framework adopted. The semi-structured interview schedule allowed the interviewer to conduct in-depth interviews by probing for information to ensure that sufficient information was obtained. This meant that sometimes the questions did not necessarily follow in the order they were outlined in the schedule. It also meant sometimes probing more into questions that were not included in the guide, however, by and large all the questions in the interview guide were asked. The interview schedule consisted of three sections: the general information which sought to capture the respondents details, for example the job title, age, race, qualifications, and how many years they have been in the clinic. The second section required the respondents to state their reasons for working in the area and the challenges encountered. This provided information which spoke to the first objective i.e. to determine the challenges faced by HRH in rural KZN. These data were then used to address themes related to the challenges which included the contextual challenges, and professional challenges. The last section contained questions on government's intervention strategies. This section sought to obtain information that would aid in responding to the second objective i.e. to review the national strategies and their role in addressing the challenges faced by HRH in rural KZN. Furthermore, the information from this section guided the researcher in the formulation of themes.

However, not every respondent was comfortable about the recorder being used in the interviews as some feared that it would breach confidentiality. The researcher emphasized and assured each respondent that the information provided would be treated with utmost confidentiality. The interviews took between 30–45 minutes each. Interviews with healthcare workers would inform on the challenges facing HRH working in rural

areas (table 8) and the role of national strategies in addressing these challenges faced by HRH.

3.1.6. Data capturing

A tape recorder was used to capture the data. Using a tape recorder allowed the researcher to concentrate on questioning and listening. It provided accurate and unbiased recording, the researcher could re-listen to the interviews, and also allowed direct quotes to be used in reporting the findings.

3.1.7. Data analysis

Following the completion of the interviews, audio recordings were transcribed, which involved listening to the audio and typing down the questions asked, and the responses from the participants. The transcripts were verified by an independent person to ensure accuracy. Each written transcript was read several times while listening to the corresponding data tape to ensure accuracy. Key statements were highlighted which were used to identify themes. The themes for each interview were then compared to identify commonalities and differences in order to come up with overall themes which provided the basis for writing up how these respective themes are interrelated.

Analytical Framework adopted

The following two approaches were used in categorizing and analyzing the data in the study:

1. Deductive approach
2. Inductive approach

According to Saunders et al, (2003) a deductive approach makes use of the existing theory or ideas to formulate a research question and objectives, and the researcher can use the theoretical propositions that assist in doing this as a means to devise a framework to organize and direct data analysis. There are two types of deductive analysis strategies namely; pattern matching and explanation building. The researcher used pattern matching

analytical strategy. The procedure makes use of two sets of variables: the dependent variable and independent variable where the independent variable is expected to produce outcomes which would affect the dependent variable. In the study, the researcher used the theoretical propositions from the literature review conducted to specify the dependent variables which would be the challenges faced by the HRH in rural areas. These challenges are expected to be impacted on by the national strategies, which is the independent variable.

The themes of the independent variables were identified in advance. The concepts were mostly drawn from literature. During the analysis, the data collected was matched with the respective intervention strategies. Further, the literature informed the challenges faced by HRH working in the rural areas. The challenges were categorized into three themes: the contextual challenges, professional challenges, and patient related challenges. These themes provided direction for what to look for in the data. The researcher searched for data that matched the themes during the data analysis process.

An inductive approach on the other hand is the alternative of the deductive approach where the researcher starts to collect data and then explores the data to see which themes or categories emerges in relation to what they are looking for. The researcher used template analysis which uses categories that represent the themes that have become apparent from the data collected. The process uses categories to predetermine and then amend or add to as the data is being collected and analyzed (Saunders et al., 2003).

Data analysis was conducted by incorporating the inductive approach to the deductive approach. This means emergent categories were matched and added onto the present themed categories as they became apparent. The advantage of this approach is that it links ones research to the existing body of knowledge in the study area, and provides one with an initial analytical framework (Saunders et al, 2003). The data analysis process was interactive where the initial categories, falling under the original themes were sometimes adjusted in order to accommodate the emergent categories that became apparent during data analysis. The researcher ensured a continuous build up on the themes by reading and

re-reading the text until no new themes could be identified. This provided a basis for writing up the findings.

3.2. Reliability and validity of the survey instrument

The researcher ensured reliability of the questionnaire by ensuring internal consistency. This meant that the questions were formulated in such a way that there would be consistency from the respondents on the answers provided. After the interviews were conducted, the interviewer correlated the responses of each question to those of the questions of the other interviews. The responses provided by the respondents, for instance on the challenges facing HRH in rural areas were consistent. Further, the researcher ensured that the content of interview schedule compared to the actual situation that was being studied. Hence the questionnaire content consisted of questions relating to the challenges facing the HRH and consequently the national strategies and their role in addressing these challenges. This content consideration was aimed at ensuring validity of the questionnaire.

3.3. Conclusion

This chapter details the research methodology used in the study. This includes a look at quantitative and qualitative research; their advantages and disadvantages. The researcher chose a qualitative research design for this study so as provide more in-depth and comprehensive information. The study setting was Hlabisa sub-district of rural Kwa-Zulu Natal and cluster sampling was used. Data collection was conducted using an interview schedule guide among 25 HRH. After the interviews, data was transcribed and then used to obtain overall themes for writing up the findings. Reliability and validity of the research instrument and the limitations of the study are also discussed. The following chapter contains the findings of the study.

CHAPTER 4 – FINDINGS OF THE STUDY

4.0. Introduction

The study involved face-to-face in-depth interviews with 25 doctors and nurses working in the rural KwaZulu Natal. This chapter presents the findings of this study by providing the general information about the HRH, distribution of the HRH sample on each cluster by age, race, occupation and qualification and the reasons that have influenced the HRH to work in rural areas. It further contains the responses provided by HRH on the challenges facing them in the course of their practice and their views on government strategies which are aimed at addressing these challenges.

4.1. General Information

The information presented in table 16 and 17 below was obtained from the health professionals with reference to their job title, the length of time in the post, the number of patients attended to per day and whether they saw the need to have more professionals in the clinics.

Table 16: information on the HRH interviewed

Job title	Age (Median)	Number interviewed	Length of time in the post (Years)	Number of patients attended per day (approx.)
Staff Nurses	30	4	3-5	50
Professional nurses	40	11	4 -30	80- 120
Medical doctors	37	4	3-5	50

Community service doctors	30	3	1	50
Foreign doctors	33	3	2-5	50

Table 17: Distribution of HRH per cluster by age race occupation and qualification

Cluster	A	B	C	Total
Professional Nurse	5	4	2	11
<i>Age (Mean)</i>	40	35	35	
<i>Race</i>	African	African	African	
<i>Qualification</i>	Degree	Degree	Degree	
Staff Nurse	2	1	1	4
<i>Age</i>	30	30	30	
<i>Race</i>	African	African	African	
<i>Qualification</i>	Diploma	Diploma	Diploma	
Doctors	2	1	1	4
<i>Age</i>	33	35	45	
<i>Race</i>	Indian African	African	White	
<i>Qualification</i>	Degree	Degree	Degree	
Foreign doctors	1	1	1	3
<i>Age</i>	35	35	40	
<i>Race</i>	White	White	African	
<i>Qualification</i>	Degree	Degree	Degree	
Community service doctors			3	3
<i>Age</i>	-	-	30	
<i>Race</i>	African	African	African	
<i>Qualification</i>	Degree	Degree	Degree	
Total				25

4.2. Challenges facing HRH in the rural areas

HRH emphasized the need for the government to intervene and improve the conditions in rural areas in order to attract and retain more staff. The following challenges act as push factors for many health professionals working in rural areas.

4.2.1. Contextual Challenges

Responses on the contextual challenges encountered in the course of rural practice are categorized as follows:

4.2.1.1. Poor living conditions

The living conditions were highlighted as a main challenge by the health professionals working in the area. They expressed their frustrations with regard to the living conditions in their respective settings. These include; water shortage and electricity cuts which hinder the daily operations of the clinics. The problems of the water and electricity have been ongoing, which makes it difficult to operate some of the basic equipment in the clinics. Some of the nurses felt the housing was inadequate in deep rural areas.

“We have a problem with water and electricity so some doctors and nurses don’t want to work here. Like today you can see we are not busy, because we don’t have electricity to operate the equipment”. -Staff Nurse

“If I can tell you we don’t have water since Monday, we don’t have electricity since morning we don’t have generators. In the front we need to do vital signs, but all the equipment’s work with electricity so we can’t do much. But anyway we are willing to help”. -Professional Nurse

“Water and electricity are a major challenge. Sometimes you don’t have water for up to two or three months”. – Medical Doctor

“No water, electricity sometimes cut off it becomes very difficult to work with the congestion”. - Staff Nurse

“The rooms for the nurses are very small. For instance in one of the rural village one of the staff nurses took me to her house it’s a small room, and not in good condition”. - Professional Nurse.

4.2.1.2. Infrastructure

The HRH expressed the need for the general improvement of the infrastructure in the area. This includes the roads and telecommunication, with much emphasis on internet access and other means of ensuring they have access to information which will ensure they are in touch with the outside world. This would improve professional networks making it easy to for HRH in rural areas to interact with other professionals in urban areas .

“Poor infrastructure is the main challenge, for you to provide comprehensive health care you need to have good infrastructure in place”. -Professional Nurse

“I would say one of my main challenges is communication, though its more or less expected in rural areas, but it’s a challenge”. –Foreign Doctor

“We sometimes have a problem communicating with the outside world, internet is a challenge”. -Community service Doctor

“We are far behind with the information, in other provinces or urban areas and townships they get information more easily than we do”. -Professional Nurse

The roads to most of the clinics are generally ok. However it’s a nightmare driving to the deep rural clinics”. –Foreign Doctor

The HRH, especially the doctors and community service doctors, who have to rotate in various clinics within the sub-district clinics, have to drive long distances to get to the deep rural clinics. Some of the nurses stated how they have to travel about 60 kms to the

clinics every day. The distances and poor roads makes it difficult to get ambulances on time the HRH stated that sometimes a call is made for an ambulance but it only arrives about 4 to 6 hours later because of the distances and poor roads with potholes as expressed in the following statements:

“Sometimes you make a call for the ambulance to come and it only arrives about 4 to 6 hours late, am talking about the clinics in deep rural”. – Medical doctor

“Distances are quite a challenge, like I travel about 60 kilometres to work every day and transport is also a problem”. -Professional Nurse

“Yes distance is a major challenge. I have to travel 50 kilometres everyday to come to work.” -Professional Nurse.

Coming to work and going back costs R48 per day unless I get someone that will drop me half way. So there are too many expenses because the areas are too far from town and its costly”. -Professional Nurse

4.2.1.3. Isolation

Isolation was highlighted as one of the challenges facing the health professionals working in rural areas. They expressed how the lack of social groups and professional networks makes life very difficult, hence the health professionals have had to come up with adaptive mechanisms in order to cope with the feeling of being isolated, as expressed below;

“At first when I came here, especially the first few weeks you wish you could go back, but then as time goes on you adapt, because you don’t get support groups in the area”. - Professional Nurse

“Sometimes you get this feeling like I’m stuck in the rural areas with the patients”. – Community Service Doctor

“Yeah... I do kind of feel isolated, considering my family and friends are back home, but again its about saving lives”. – Foreign Doctor

“Social welfare of the nurses is lacking, sometimes you release the emotions to the people because you are stressed. You say something but you can’t reverse it because you already said it”. -Professional Nurse

On the other hand, they reported that there is need for professional networks which would help the health professionals interact and share their experiences and knowledge as a way of sharpening each other’s skills as shown in the statement below:

“I guess the way I feel isolated is professionally, since there are no other senior doctors to discuss cases, I struggle a bit with that and knowing that you are making decisions, you should reflect on your own practice so at least when you have another senior doctor around you learn more”. -Foreign Doctor

4.2.1.4. High disease burden and planning

The rural area where the study was being conducted has a high HIV prevalence. This disease burden has added extra strain on the existing health care system, which is already disadvantaged by the shortage of HRH. The system ends up being stretched, and under pressure which translates into poor quality of health care provided as described by one of the foreign doctors:

“There is definitely a challenge of dealing with the burden of disease, HIV and TB, there’s just so much that it’s stretching the health system, the health system can’t really cope. We are working under pressure, and working really hard but there’s no light at the end of tunnel”. -Foreign Doctor

“There is a lot of work; unfortunately the government has not attracted enough doctors to deal with the high disease burden”. –Medical Doctor.

“The HIV burden is obviously quite heavy and considering the system is fragile, especially in rural areas, its quite a big challenge”. –Medical Doctor.

The HRH expressed that the government comes up with policy initiatives but there’s not enough planning to ensure that these initiatives are effective on the ground. This is illustrated in the following statement:

“Political support is always an issue because, not many people understand that rural areas need many more resources to achieve the same outputs as urban, a rural setting because of geographical and topographical differences can cost a lot more money to put 1000 patients on ART , than it would in Durban especially when budgeting is put into perspective in regard to size of the districts and not just population size”.- Medical Doctor.

“We are the second most deprived district in country according to deprivation index. KZN has five out of the top 10 most deprived, but Umkhanyakude is no. 2 so things are tough here, We need a lot of political support and I know policy makers are tired of hearing people from the rural area saying this time and again, but we desperately need support structures, people we can ask for help”. -Medical Doctor.

4.2.2. Professional challenges

Professional realities facing HRH in rural areas include; poor management and supervision, inadequate equipment and supplies; emotional burnout, few or no specialists, and broken referral systems.

4.2.2.1 Salaries and allowances

Respondents expressed how happy they were with the implementation of OSD which has seen many of them earn good money as opposed to what they were earning before. One major concern with the salaries, however, was with the rural allowance and its distribution. The health professionals felt that there was poor implementation of the rural

allowance. The doctors are entitled to between 18% and 22% of basic salary as a rural allowance, while professional nurses are entitled to between 8% and 12%. The staff nurses on the other hand are not given rural allowance. Respondents felt that there should be a significant difference in the rural allowance between those working in rural and deep rural areas as expressed in the following quotations:

“At least with OSD implementation we cannot quite complain, but again the question is whether its effective enough to attract more doctors in rural areas, because that’s the challenge”. –Medical Doctor.

“The difference between 18% and 22% is ridiculous, I don’t know what made them think of such a small difference, and remember it’s of a basic salary. The basic salary is basically 70% of package so at the end of the day it doesn’t work out to that much difference”. -Medical Doctor

“So if you want to incentivise it differently where, a proper deep rural is defined well, significantly more than others, not asking for lots of money but it needs to be reasonable”. -Medical Doctor

“I do not understand which criterion was used for the rural allowance. We do all the donkey work in the clinics but end up not getting any rural allowance”. –Staff Nurse

4.2.2.2. Management and supervision

There were mixed feelings with regard to management and supervision being offered at the clinics. Some clinics, especially those in deep rural areas, felt that they had been neglected by management, which only came to the clinics when there was a crisis. On the other hand most of the HRH in the other clinics didn’t have much to complain about as seen below;

“The management is trying but there’s a lot more to be done”. –Medical Doctor

“The Management comes but when they come they come to look for faults. And when they come to do the audits they come with that attitude that surely, there must be something wrong”. -Professional Nurse

“The management does not support us they do not even know how we work at the clinics”. -Professional Nurse

“You see when you are working at the clinics you just feel like you are deserted the management will only come when there is a crisis”. -Professional Nurse.

*“Recognition to feel you are being recognized for the work that you have done. Most of the time nobody appreciates us from the management, we work as doctors in the clinics; meaning we have to handle so much in the clinics. So I believe recognition is important”.
- Professional Nurse*

“You see when you are working at the clinics you just feel like you are deserted the management will only come when there is a crisis”. - Professional Nurse.

The HRH expressed that much as they expect timely and open feedback with their supervisors, in order to inform them on what is happening, and what need to be improved on or corrected, they do not have proper feedback channels in place through which to voice their dissatisfactions, as shown in statements below:

“The channels of communication are not all that reliable, sometimes as a nurse you want to suggest something or say something, but then you find that there’s a barrier between unit manager and nurse manager”. –Professional Nurse

“The problem is that even when the people from the Department of Health come to the community to address them, they do not prioritize as to what is lacking in the clinics, there is no proper feedback on the challenges on the ground”. -Professional Nurse.

4.2.2.3. Equipment and supplies

Equipment and supplies featured as one of the main challenges facing HRH. This is evident in the inadequate supply of equipment in the clinics. Some clinics which attend to between 80- 120 patients per day have only one blood pressure (BP) machine. Some of the TB wards do not have masks, and infectious disease control medication for the health professionals. Delivery of supplies and medication are often delayed. The nurses and doctors expressed their disappointment in this regard since they have so many patients to attend to but haven't the equipment needed to do the job as described below:

"It's a bit of a challenge, and mostly the delays in medicine supplies". –Foreign Doctor

"Also the other problem is supplies of equipment. One BP Machine just imagine the queues- for this one BP Machine, it creates a backlog, and the patients have to wait longer". -Professional Nurse

"We don't have equipment, we are overcrowded and we end up using one BP machine for like 1000 people, so if there's no electricity even the scales won't work. Our equipment is bad. There are even no thermometers if a baby comes with fever, you must use your hand". -Staff Nurse

"Supplies would be the main problem, they are there but not enough in clinics we are very frustrated". -Professional Nurse

"With the supplies, when it's finished there are delays, but generally the government is trying, the only problem is that the patients have to come back and fetch the medicine and they are coming from very far". -Professional Nurse

"Even medication I'm sure the government can improve, the type of medication, some of medication is not available within the government, the patients have to go and buy". - Professional Nurse

Sometimes when the patients come we don't have medicine for them because of the delays so we ask them to come back after a few days to collect, so you find when the patient comes back they are really sick- with multiple symptoms hence you have to diagnose again". – Medical doctor

4.2.2.4. Training and career development opportunities

The HRH are happy with the training opportunities provided by the government. Some of the nurses prefer working in the rural area for a certain period of time in order to take advantage of the training opportunities in rural areas. The study leave are granted to facilitate one's study. The project nurses, who are attached to NGO working in rural areas in collaboration with DOH are provided with an 80% fee subsidy to facilitate their training as expressed below.

"Training opportunities- yes we are offered the opportunities to do whatever you want, only your own laziness that will make you not to advance". -Professional Nurse

"Training opportunities, yeah there are, but we are too many to be trained together, but at least the government is trying". -Professional Nurse

"Training opportunities are there. Some are full time but sometimes its part time. You get study leave". -Staff Nurse.

"Training opportunities are there, the only challenge is that when the staff get trained, and especially the young health professionals they opt for something more challenging hence they migrate to urban areas where they will put to use what they have learnt". - Medical Doctor

The nurses felt that continuous professional development is important and more so in the rural areas where most of them take a lead role in the treatment of patients due to scarcity

of doctors. They saw the need to be empowered with a mix of skills to enable them deliver quality health care to the patients as expressed below:

“The government should consider the nurses who work in the clinics and consider empowering them since at the clinics we haven’t got doctors and have to make our own decisions, and if anything goes wrong it’s your baby, you have to deal with the situation the way it is. We need to be empowered with skills, workshops that give us more training and education”. - Professional Nurse

4.2.2.5 Staffing Inadequacies

The HRH saw the need to have specialists and more doctors in the clinics as most of the time nurses have to make decisions about the patients, which includes making referrals in cases where the patients need special attention. The nurses expressed how important it would be to have specialists at least in some of the main clinics which would then mean that the patients from other smaller clinics can be referred to bigger clinics to see the specialist.

“There is definitely a need for more doctors. The Government must work out a strategy to especially attract doctors in rural areas”. – Medical Doctor.

“We don’t really have specialists; they used to come because this is one of the busiest clinics. The doctors used to come once a week but they used to come from mother hospital we have doctors who come on Tuesdays, however, and they used to be helped by NGO doctors who are specialized with HIV, otherwise many people would have died, but these doctors are so skilled. Especially with the children, even today there is a doctor who comes on Friday, if you look over there she even comes with toys , children are playing, even the children who don’t have opportunity to play with the toys are very happy”. -Professional Nurse

“With us nurses we can refer a person to the hospital only to find they are left for days and days because of the overload of patients, only to come back and say I went there but I didn’t get any help so I came back”. -Professional Nurse

“The government is trying to address this problem by introducing the District Support Specialists, the strategy implementation is underway, and this would solve the specialist problem to a great extent”. –Medical Doctor.

4.2.2.6. Workload as a result of staff inadequacies

On average the nurses attend to between 80-100 patients on a daily basis, and since most of these patients are coming from far they have to be attended the same day to avoid a backlog. This often leads to emotional burnout, stress and frustrations, as expressed below.

“Working under pressure and working hard but there’s no light at the end of tunnel”. – Foreign Doctor

“The workload is too much; imagine you are supposed to do a job for 3 alone”. - Professional Nurse

“The work overload is unbearable, it’s too much, and we need more nurses and doctors to help”. -Professional Nurse

“We experience emotional burnout, you say something to someone, not intentionally but because you are tired, only to regret later, I wasn’t aware I hurt someone”. -Professional Nurse

“About emotional burnout, I think that was one issue that wasn’t attended to that much, for me I think as staff we need to have a plan for the staff like to refresh them, maybe even just once a year, I think that helps you a lot, take nurses out to help them take out the steam, it keeps you going”. -Professional Nurse

“Yes we get really drained emotionally. No time for lunch especially here in TB you get tired”. - Staff Nurse

4.2.2.7. Outsider Bias / lack of community support

Some of the health professionals interviewed have come from other areas to work in this setting. They stated how they experience some outsider bias from both fellow colleagues and also patients who wonder why they had to leave their home to come and work in the local community. The foreign doctors expressed how difficult it is for them due to the challenge of language and not understanding the culture of these people as expressed below:

“The feeling is there, but I guess its more focusing on what really motivates you to do what you do. But you definitely feel it”. –Foreign Doctor

“Sometimes the community has got this attitude that this one is coming from Eastern Cape and our kids don’t have a job, why should we have some funny faces that we don’t know and why didn’t they employ our own kids”. -Professional Nurse.

“It’s hard to know what the patients think about you as a foreign doctors, when you try show them empathy, or engage and be kind to them, they don’t understand why you are doing that, historical patterns makes sense they are not used to white people showing empathy and being nice, so you feel like they don’t understand what you are doing there as a white doctor”. -Foreign Doctor.

“Sometimes you don’t feel all that welcome. They almost make you feel like they don’t trust your intention of coming to work in rural areas”. –Foreign Doctor

*“The community has this bad attitude towards us because we are not from this area, they put on funny faces like, where are you from, and why they can’t employ our own kids”.
Professional nurse*

4.2.2.8. Inadequate referral systems

The doctors were particularly upset with the referral systems which are not in good shape. In the absence of doctors, nurses refer patients to sub district hospitals. However, for doctors, referrals are a challenge because when they are dealing with critical cases they have to refer the patients to the next level of health facility. Doctors feel this is frustrating since they get stuck with patients who should be referred. They expressed their frustrations in the statements below:

“Referral is a nightmare, that’s all I can say, yet you are talking about some very severe cases which needs urgent attention, not a good experience”. –Medical Doctor

“The referral path right now doesn’t work; it’s very difficult to refer a sick patient to a higher level. What happens is that Albert Luthuli and King Edward are so far away from us , it takes me one day of my time to try getting a patient through to one of the facilities if I’m lucky, sometimes it takes even more”. -Medical Doctor

“It’s not a big challenge referring from clinic to the Hospital, but Referral system beyond the hospital is completely broken, you can spend the whole time on phone trying to sort out something”. -Foreign Doctor.

4.2.2.9. Ethical conflicts about treatment

The HRH highlighted one of the challenges facing them in their rural practice was cultural beliefs which were at times in conflict with their efforts to provide quality health care. Considering the high burden of disease in the area, which to some extent has been caused by people’s beliefs which makes them refrain from taking medication, since some of them believe it’s not a medical condition but that someone has bewitched them. This is a big challenge especially in the roll out of ART in the area, since some people end up defaulting only to come back when they are sick again .

“Due to ignorance and also culture – they believe they are bewitched, it will take I don’t know how many ages for us to be get away from the culture and get enlightened. Some people are even highly educated but when you sit down with them you find that culture is deeply rooted in our blood, we have been mentored with beliefs”. -Professional Nurse

“Culture thing is a problem for most of them, because they still deeply believe in our the cultures, especially with ART it's even worse, that's why we had this resistance and patients defaulting from taking medication, because we still believe so much in culture. Some people migrate from big towns and come home when they are really sick, but when they get better they will go back to the big towns and even stop taking medicine, it really becomes difficult. –Professional Nurse

“One main challenge for me is the conflict between traditional and modern medicine. But you understand it's an effect of culture”. –Foreign Doctor

4.3. South African adopted intervention strategies

The South African Government has come up with several policy initiatives and national strategies aimed at addressing the shortage of HRH in the rural areas. These strategies include community service for health professionals, recruitment of foreign doctors to work in under-served areas, provision of rural allowance, and the implementation of Occupational Specific Dispensation (OSD). The study sought to evaluate whether the strategies are working in addressing the challenges faced by the HRH in the rural areas.

Attracting the HRH to the rural areas has proven difficult over the years, despite the fact that they are more needed in the rural areas considering 46% of the country’s population is in the rural areas where there remains a high burden of disease. The government recognizes the need and has therefore adopted the following strategies to attract more HRH in the rural areas. These include:

4.3.1. Rural allowance

The responses showed that one major concern with the rural allowance is in its distribution. The health professionals felt that there was poor implementation of the rural

allowance. The categories of rural allowance consists of 18%-22% rural allowance for doctors and 8%-12% for professional nurses. There's however inequitable distribution of these allowances and the criteria used in definition of these two categories isn't clear. Some HRH gave examples of what they consider to be unfair distribution stating that, for instance, some hospitals in Durban Metropolitan get 18% while some in Port Shepstone which is a fairly modern town with shopping malls and cinemas, get between 18% and 22%. This shows there's no clear difference between deep rural, rural and peri-urban, settings. Further, staff nurses working in the rural areas are not entitled to rural allowance despite the hardship they have to encounter and the workload from a high disease burden

"I do receive a rural allowance yes, but I understand there was something wrong with how the whole process of implementation was carried out, otherwise I would say it's a good idea if implemented correctly". –Medical Doctor

"The difference between 18% and 22% is ridiculous, I don't know what made them think of such a small difference, and remember it's of basic salary. The basic salary is basically 70% of package so at the end of the day it doesn't work out to that money difference". -Medical Doctor

"So if you want to incentivise it differently where, a proper deep rural is defined well, significantly more than others, not asking for lots of money but it needs to be reasonable". -Medical Doctor

Rural allowance lacked proper definition which has resulted in discrepancies in its administration. Some doctors in peri-urban areas are getting about 22% while some of us working in rural and deep rural would only get 18%". –Medical Doctor

Most of the nurses welcomed the initiative by the government to introduce rural allowances as this was one way to make them feel appreciated. With the introduction of OSD, where salary structures were revised and standardized for different categories and specialties, nurses felt that at least the rural allowance gave them an edge over their urban

colleagues, hence for most of them there would be no need to go work in urban areas while you are getting more money by working in a rural area.

For some nurses, this also translates to some savings, considering there are no attractions like shopping malls to spend your money meaning it was easier to save.

Staff nurses however felt that rural allowance brings about discrimination, because it's only entitled to professional nurses. They saw the need to standardize the allowance across the board considering they are also in rural areas and are doing most of the work as expressed in the following quotation:

“I’m happy about OSD, because of OSD we are much better, good salaries am happy but am not happy about rural allowances. We are all working in rural area, but when it comes to allowance they give priority to registered nurses only”. - Staff Nurse

4.3.2. Occupational Specific Dispensation

The nurses stated that OSD was a bit frustrating when it was first announced. There was a mix up as to who qualified and who didn't. One of the nurses who then worked in hospital before she could be posted in a rural area had this to say:

“I think OSD created a lot of frustration when it came, especially for nurses because we didn't understand the criteria. How did they come about with the criteria which department should get OSD. Because with us as nurses we felt every nurse is important, wherever she is, you find when the OSD came the nurses who are in ICU even if they didn't go for training for the specialty but then, automatically because they are in ICU they would get OSD as a specialty. Imagine what would happen, we were in same group and if you are in medical ward, because the medical ward isn't a special ward you wouldn't get the OSD. Then I was in maternity which wouldn't be treated as special ward, if I wasn't taken to a special ward. Those in clinics and in special wards would get

the OSD. It was very frustrating to an extent people didn't want to work hard; they would say the people getting paid more should work". -Professional Nurse

OSD is one very important initiative by the government, which is really welcomed by the nurses working in the rural areas. They feel that they have been remembered by the government and that their efforts have been rewarded. To many it shows appreciation and the recognition by the government. The nurses were mostly positive when asked about OSD. They said they were happy OSD had helped them.

"Yeah, OSD is a brilliant idea, I would say it has motivated many doctors who are working here, so I think people are happy with it". -Medical Doctor

"We are so happy about it. It has improved our life, and the way they have done it, we are so happy, it improves our lives". -Professional Nurse.

OSD has given most of these nurses working in rural area some financial stability. Most of them feel that they can afford to do a lot more than they could with the previous salary as in the statements below:

"Before OSD I couldn't manage to pay for my studies, but now I can". - Staff Nurse

"People are keen to move from NGOs back to DoH, because the salaries are better in DoH, so it's clear to me that strategies are definitely working , they are encouraging people from NGO back to DoH which is a good thing. Its working to an extent, these things would only work to an extent". -Foreign Doctor

4.3.3. Recruitment of foreign doctors

Most health professionals are not keen to work in the rural areas which has led to government recruiting HRH from abroad to work in underserved areas.

The nurses and doctors interviewed expressed how happy they are to have foreign doctors helping out in rural areas. The view was that government should allow more foreign doctors to work in rural areas. Most of these foreign doctors are employed by an NGO which is conducting HIV research, but the NGO is in collaboration with the Department of Health which sees most of these foreign doctors working in DOH clinics. There was a general feeling that foreign doctors are more dedicated than the local doctors as expressed in the statements below:

“Truly speaking the foreign doctors are more dedicated compared to our doctors. They really work since they don’t have family here so they dedicate their whole time. They don’t mind working even after hours, unlike our doctors. -Professional Nurse

“Our doctors here they don’t want to come back and work here, they want big cities where life is easier, but foreign doctors are willing”. -Professional Nurse

“They are good and they got care, I won’t lie, they like their patients, they like their patients. I don’t have to compare with our doctors but I must say. Yes, they like their patients and they take a good care of their patients”. - Professional Nurse

The respondents were in agreement that the foreign doctors do help alleviate the shortage of HRH in rural areas. However, the health professionals felt that government’s decision to reduce the number of foreign doctors to 5% for each health category was unrealistic considering there is a dire need for doctors and nurses in rural areas as described below:

“No I don’t think it’s a good idea the government needs to revisit the issue. The foreign doctors I would say are like the backbone of rural healthcare, we need them and in large numbers”. –Medical Doctor.

“They need to be reasonable; the thing is that they can do that when they have sorted out hospitals and clinics. And make sure it’s attractive to work in rural setting. Doctor is a

professional and expects a certain quality of life, if he cannot find the quality of life in a rural setting how can you expect him to come and work there”. -Medical Doctor

“Before the government arrives at that decision, they have to ensure that the health systems are working first, it's incredibly difficult to get South African doctors to come work in rural areas, I have tried, it's very hard”. -Medical Doctor

“It's a bit short sighted to me, since there aren't enough home grown doctors so if people are willing to work it would be gross to turn them away. They come with high levels of training, they come to build capacity and there is much potential that comes with foreign doctors, you shouldn't limit them especially if you don't have capacity”. -Foreign Doctor.

“I would say, from the look of things, there's need for more doctors, most definitely”. -Foreign Doctor

“Yes, I don't think they should be so much limited to 5% because we are always running short of doctors”. -Professional Nurse

“I don't think it's right to, they should give them opportunity if they want to if they do qualify, because at the end they are here working more than our doctors, they give more than our local doctors they are after money more than helping community”.-Professional Nurse

The nurses expressed that the presence of foreign doctors means that they can also benefit from the skills from other parts of the world and these foreign doctors are more than willing to share with the nurses in the clinics which they are happy with. The nurses stated in the following quotations:

“They are willing to learn, they also got some information that we don’t have. They keep on sharing the information that we don’t have”. -Project Nurse

“Yah, we need new information and new experiences”. -Professional Nurse

The foreign doctors admitted that it’s a challenge to work in rural South Africa, especially due to the high burden of disease. The foreign doctors have two main challenges they are faced with which include language and culture. They have to use a translator and hence they cannot really engage with the patients as they would want to, also knowledge of the culture would help in dealing with situations on a daily basis as suggested below:

“The main challenge for me is the language, not being able to speak language conversant with the patients, it’s a big challenge to providing healthcare as a doctor, not understanding and know how to deal with issues, since you can’t properly engage with patient”. -Foreign Doctor.

“There’s no deep understanding of culture, as a doctor you need to understand issues that patients might have, you find yourself in the dark about some things, hence it’s a bit of challenge since you don’t know how to deal with certain situations”. -Foreign Doctor.

4.3.4. Community service.

Community service is a government initiative which requires health professionals to serve a mandatory one year after completion of their studies in district level, tertiary and regional hospitals. This means that there’s a lot of competition as most health professionals want to be posted in big towns, where they can further their skills by getting specialized training, leaving the rural areas to the ‘unlucky’ few, who do not want to be there by choice. Further some of the professionals are obligated by conditional scholarships which dictate that they should go back and serve their term in the rural areas.

“I’m here because of the scholarship, as one of the requirements is to come back to rural hospitals”. -Community Service Doctor

“I applied to come here because of the scholarship, and its mandatory for you to come back, the scholarship condition is for two years”. - Community Service Doctor

The HRH noted that the impact of community service in this rural area is evident. The sub-district hospital has about seven doctors who are there for community service. The doctors are dispatched to the clinics to perform general health care. There is a greater need for more doctors in the area, but the situation would have been worse without these doctors in the rural area, as noted below;

“ The sub-district hospital is staffed with community service doctors, this strategy by the government definitely works, the hospital wouldn’t survive without that system, the hospital has something between 12 to 14 doctors, majority of them are community service staff, but of course the challenge is to retain them after the fixed period of time”. - Medical Doctor

“We need support really, and community service doctors really help with that, we are happy to have the few, but if it was possible to redirect many more to rural practice that would be great”. –Medical Doctor

The community service doctors expressed their desire to work in rural areas, however the poor working conditions remains a real challenge. There was also a desire for capacity development.

“At least there is need to upgrade things to our levels of technological abilities” – Community service doctor.

“We need Professional development because you are isolated out here, but especially if referral hospitals would encourage that. Some kind of interaction will make you feel like they are supporting you”. - Community Service Doctor

“You find that no one is offering you the skills and development of what the rural doctors don’t know so you also end up becoming another rural doctor”. -Community Service doctor

Besides the initiatives by the government to attract HRH in rural KZN, the health professional highlighted other factors that have attracted them to come and work and stay in rural KwaZulu Natal which will be discussed below.

4.4. Reasons for choosing to work in rural areas

This first section provides insights into why HRH decided to work in rural areas. The following reasons were provided.

4.4.1. Background

Having a rural background was highlighted by most of the nurses as one of the reasons for working in rural areas. Most of them said they were born and brought up in the rural areas and therefore they didn’t mind working in this kind of setting.

“I grew up in rural area and I find it easy to work with people in rural area” - Professional Nurse

“I can say am working here because my home is around”. -Professional Nurse

“There is no other reason in fact, but because am staying near home”. -Professional Nurse

“I was born and brought up in rural area so I understand how they feel I understand everything about being in rural area,” -Professional Nurse

4.4.2. Family reasons

Most of the nurses and doctors have families in the rural areas, which contributes primarily to their decision to stay and work in the rural setting. The older nurses especially are well established in the rural areas where they have houses and their children are in schools.

“Sleeping at home everyday- I can come to work every day from home, at least I don’t have to leave my family”. -Staff Nurse

“This is my area, my family is residing here. Am happy and I wish to improve my area, I don’t want to run away because if I do there will be more problems. I’d be more happy if my area is improved”. -Professional Nurse

4.4.3. Passion for community

Some nurses and doctors are just passionate about the communities in which they work. For some they feel that it’s much easier to work with the communities since there is a sense of being wanted and welcomed in the community.

“I just like to see that im doing something to save lives, it’s a great fulfilment”. –Foreign Doctor

“Personal reason is that looking at child health in rural area, improving the health of kids in rural community, its most needed”.- Medical Doctor

4.4.4. Training opportunities and specialization.

Some of the nurses have chosen to work in the rural area because they feel there is competition in urban areas when it comes to training opportunities and career development. Since most of the nurses working in urban areas are young and want to study, this has seen some of the nurses opting to work in rural areas in order to seize the opportunity to further their studies. They feel that there is a long waiting list of people who want to be granted study leave in urban areas and you would have to wait for a long time before you could get an opportunity, while in rural settings people are not all that

eager to study, hence for someone who is interested you can study part time and work at the same time.

“The problem with urban areas is competition when one wants to study, here in rural areas, people are not all that eager to study so if you want to study its easier, in urban you have to be put on a waiting list and the queue is too long”. -Professional Nurse

There is a well-established NGO working with the community in the area, and their main focus is on HIV and AIDS, where they are mostly involved in ART rollout in the area. The NGO works in collaboration with the Department of Health; hence they have doctors and nurses in the clinics. Most of the doctors are foreign doctors who have come mostly from UK and take it as an opportunity to conduct research as they improve health for rural populations. Some nurses in the clinics are also employed by the NGO, and they provided one of the reasons of working in the rural area as the opportunity to do some research and get a better understanding of HIV. Most of them felt that this provided an opportunity for career development which would secure them better jobs in the future as shown in the statements below:

“I’m working because am working for an NGO; if the NGO wasn’t here I wouldn’t choose to work in rural area”. -Professional Nurse

“And honestly the other thing is that if you got HIV/AIDS experience, knowledge and skills it’s much easier for you to get a job”. - Professional Nurse

“My main reason is research opportunity - which is around trying to improve health for rural populations”. - Foreign Doctor

4.5. Comparing Perceptions of different groups/ clusters of HRH on the challenges they face and the impact of the national strategies on the challenges

4.5.1. Nurses Perceptions

The general feeling exhibited by the nurses in light of the challenges faced is that of frustration. The main cause of this frustration is the difficult living and working conditions which includes electricity cuts, water shortage, lack of basic equipment, delays in supplies, congestion, and work-overload which results in emotional burnout and stress among others (Cluster A, B, C). Additionally, the challenges more specific to the nurses working in deep rural clinics, includes; poor roads, telecommunications, isolation, travelling long distances to the clinics and illiteracy (Cluster B and C). Majority of the nurses expressed that having a rural background and passion to serve community are the main reasons that have influenced their decision to work in the rural area since most of them were born and brought up in the area. The nurses expressed that community service and foreign doctors are effective strategies in alleviating the shortage of HRH in rural areas. Furthermore, the implementation of OSD has been welcomed by the nurses, however, implementation of the rural allowance should be reviewed to ensure proper administration and distribution to the nurses working in rural and deep rural areas. The nurses expressed that poor living and working conditions remains the main challenge facing HRH in the rural areas, however, there are no specific strategies by the government to address these challenges. Consequently, attraction and retention of nurses in the rural areas still remain unresolved.

4.5.2. Doctors Perceptions

The doctor's main concern was lack of support structures and systems in place. The doctors felt that over and above what the government had done in implementing the strategies, there should be an overhaul of the rural health systems. According to the doctors, this would be the only way to attract and retain more doctors to the rural areas. This overhaul in the health systems includes having qualified senior clinical management staff, safe housing, water, electricity, infectious disease control, ensuring safe

environments, improve the work conditions e.g. supplies and equipment, management and supervision, and providing training opportunities. Further, the doctors emphasized that government needs to invest in referral systems and ensure they are operational. With proper referrals there would be no need to bring specialists in the rural areas as they would be easily accessible both for patients and would ensure professional development for rural doctors through professional networks. The doctors interviewed go round the clinics in the sub-district hence their views described the experiences across cluster A, B and C.

4.5.3 Community service doctors perceptions

The community service doctors termed their experiences of rural posting a culture shock. Based on the kind of equipment and facilities they are exposed to in medical schools, life in the rural clinics is the complete opposite of what they are used to. Hence they stated their intention to leave once their contracts were over. This decision can be attributed to the challenges they face in the course of community service which they reported can be summed as poor working and living conditions e.g. outdated equipment in the hospital and lack of basic equipment and supplies in the clinics, electricity cuts, water shortage and lack of internet facilities. The other major challenge for community doctors is lack of professional development which means that there are no doctors to provide the skills and development that other rural doctors don't know. The community service doctors recommended more interaction between rural doctors and specialists in the referral hospitals as this would encourage professional development, however this can only be effective once the referral systems are revamped. The community service doctors are based in the hospital but they are dispatched to the various clinics hence their view represent their experiences both in the hospital and across clusters A, B, C.

4.5.4. Foreign doctor's perceptions

The foreign doctors expressed that their experiences of rural South Africa cannot be compared to what they are used to in their rural areas, with particular reference to the poor living and working conditions and the high disease burden. Other challenges specific to the foreign doctors include: a lack of understanding of the local culture,

language barrier which makes it difficult to understand the patients, outsider bias which makes them feel unaccepted, and the conflict between modern medicine and traditional medicine. The foreign doctors proposed that there should be a focus to produce more doctors locally. The foreign doctor like other doctors' visits all the clinics hence the information provided presents their views across cluster A, B, C.

4.6. Conclusion

The chapter details responses provided by the HRH with regard to the reasons that attract them to rural areas which includes their familiarity with the setting, family, passion for community, specialization and training opportunities. Secondly it contains the responses regarding the challenges facing the HRH which can be categorized into contextual challenges, professional challenges and patient related challenges. Finally are the views of the HRH concerning the national strategies which are aimed at addressing these challenges. The following chapter presents a detailed discussion of the findings in view of other previous studies related to the study.

CHAPTER 5 - DISCUSSION

5.1. Introduction

Attracting and retaining HRH in rural areas has proven difficult over the years, which has resulted in a critical shortage of health professionals especially in rural clinics. This has resulted in many policy initiatives aimed at addressing this shortage. Intervention strategies, however, need to be informed by the specific nature of the problem. This study therefore embarked on determining the challenges facing the HRH in rural KZN and evaluating the impact of national strategies in addressing these challenges. Providing evidence on the impact of policy interventions affirms what previous studies have shown that what is needed is more evidence as opposed to many reviews which have been conducted over the years (Blaauw et al., 2010). This chapter provides a discussion based on the study findings with reference to other studies, and with specific emphasis on how findings relate to the objectives of the study.

5.2. Challenges facing HRH

The challenges encountered by HRH working in rural areas consist of contextual and professional challenges as discussed below:

5.2.1. Contextual Challenges

The findings of the contextual challenges facing the HRH in the rural areas are as follows:

Poor living conditions:

Living conditions were mostly highlighted as one of the challenges facing the HRH working in the rural areas. These included poor infrastructure i.e. poor roads, electricity cuts, and poor telecommunication. Furthermore, lack of or inadequate water supply, and poor housing for the nurses in the deep rural areas. However, looking at the strategy initiatives by the government, there aren't any that are specifically aimed at addressing these problems. This adds on to evidence from previous studies (Lehmann, 2008), which

shows that although there is a correlation between the quality of living conditions and the HRH decision to work or leave the rural areas, there isn't much evidence that much has been done to improve these conditions. This means that there is need to revisit the strategy to ensure that these challenges are addressed. A good example is Thailand which embarked on a district development programme which was aimed at improving the general infrastructure (roads, phones, water supply, and radio communication), as well as the staff housing at rural district hospitals (Nitayarumphong et al., 2000). Other studies have also shown the need to have the living standards improved. For instance a study conducted on South African doctors indicated that good accommodation is one of the factors that would influence them to work in a rural area (Kotzee and Couper, 2006). Furthermore, a study conducted in Bangladesh shows that difficulty in accessing health centres, and the remoteness of the area, contributed to absenteeism, as opposed to the health professionals who worked in areas with better roads and electricity.

The national strategy initiatives by the government lack specific strategy initiatives aimed at addressing the living conditions of the HRH in the rural areas. The findings of the study feature the living conditions as a major challenge, however, the available strategy initiatives do not address this problem. This calls for a review of the national strategies to include strategies aimed at restructuring rural health facilities to ensure adequate water supplies, electricity, good housing for the doctors and nurses, improved telecommunications, and recreational facilities if they are to attract HRH in the rural areas.

Professional isolation

Another contextual challenge faced by the health professionals working in rural areas is professional isolation. Most of the HRH interviewed expressed how they feel isolated by working in the rural areas. The health professionals expressed the need to have professional networks and especially for the doctors who felt that sometimes they need other senior doctors to learn from, considering they have to make decisions regarding the patients. Hegney et al, 2002, shows how professional support networks are an important component in the nurses' decisions to work in rural areas. Furthermore, the WHO

recommends the need for professional support as a way of overcoming isolation of health professionals working in rural areas. This can be done if there are proper structures to ensure communication and peer consultations through networks (WHO, 2010). The recent implementation of District Support Specialist teams which is still underway is an effective way of enhancing professional networks by having specialists at the district level to oversee both the districts and sub-district levels. This with proper referral systems and telecommunication would assist the doctors and nurses in the rural areas by providing them with support and expertise whenever needed. However, the effect of this strategy is yet to be established.

5.2.2. Professional Challenges

Professional challenges facing the HRH in the rural areas as per the findings are as follows:

Management and supervision

The study shows that the HRH in rural KZN reported that the management should affirm them more by way of appreciation and recognition for the work done. Furthermore, there's a need to feel more valued, supported and cared for, especially considering the conditions under which the HRH are working in. This report supports other findings, which shows that although physical infrastructure and equipment were reported as some of the challenges which contribute to de-motivational factors, the need to feel valued and supported was much greater (Manongi et al., 2006). Neuhaser, 2002, notes that management and supervision determines 50% of work–life satisfaction, which means that management contributes to the staff decision to stay or leave, hence it's imperative for the management to ensure a good working relationship with staff as it contributes to retention. A study conducted in Benin and Kenya shows that HRH referred to “professional satisfaction” and “recognition by supervisors” as what encouraged them to perform well (Mathauer and Imhoff, 2006). Similarly a study conducted in rural Vietnam found that HRH were motivated by appreciation by managers, colleagues and the community.

Management and supervision is a key component in any sector and this is mostly in the health sector where the lives of patients are at stake. In the rural areas which are characterized by fragile health systems, poor management results in increased staff turnover, and in some cases demoralized health professionals. Appointing senior managers with no requisite training and skills within the rural health systems, only results in uninformed decision-making in management of facilities, a lack of urgency in dealing with crisis situations, poor work ethic and poor working relations (Versteeg and Couper, 2011).

There is need to have proper communication and feedback channels between the management and the staff. This would ensure that no-one is left to deal with difficult situations alone. The study reveals that communication channels are broken which results in problems such as equipment broken for months and delays in delivery of supplies. This call for strengthening communication and feedback mechanisms is confirmed by other studies (Boyle et al., 1999, Klemm and Schreiber, 1992, Leveck and Jones, 1996) which shows that enhancing the professional atmosphere by way of communication and feedback and providing good supervision and management is important in nurse's decisions to stay in a job. This can be done by having open communication, building a good relationship with the staff and having communication channels which ensure that feedback is provided. Hegney et al 2002, shows how professional support networks, managerial support and professional autonomy are key in nurses' decisions to work in rural areas (Hegney et al., 2002).

Outsider bias

One way to ensure that the HRH are happy to report to the clinics every day is the feeling of acceptance by the community. But if the community doesn't accept them and make them feel like they are part of them, this results in a demotivated workforce. The study shows however, that some of the HRH, especially those who are not from the area, feel like they are not accepted. The foreign doctors find it difficult because of the racial barriers which can be exhibited by the patients in the clinics and also by the community around them.

Previous research shows that job satisfaction for the HRH working in rural areas occurs within the context of community satisfaction, hence health professionals would only be satisfied in their jobs if they are accepted by the community in terms of their approach, their acceptance and making them feeling like they are part of them. This comes about by the level of friendliness exhibited by the community towards them and the level of trust they feel towards the community (Henderson and MacLeod, 2004). Embracing health professionals by making them loved and wanted would overcome the feeling of outsider bias in the HRH hence making them give their best service and their passion for the community will give them a sense of fulfilment and satisfaction.

Career Training and development

Career training and development plays a very important role in retention of HRH in the rural areas. Most of the health professionals interviewed who expressed the need to leave the rural area said it was for the professional development, especially for those who wish to specialize. For those HRH who are studying they have to do it by way of correspondence as there are no training centres within their proximities. This only means that one has to be disciplined and dedicated to study by long distance. However, for those who wish to study by instruction, they have to leave the rural areas and go back to urban areas where they can access the training more easily. This affirms previous studies (Pong and Russell, 2003) which noted that the rural health professionals encounter some difficulties in accessing the career development opportunities, which is due to staff relief, long distances to travel, high travel costs, which prevents them from participating in career training and development activities.

The health professionals working in rural KZN expressed how they are faced with unique and diverse issues saying there is a need to equip the health professionals with multiple skills which will enable them to respond adequately to these challenges. This is especially true for the nurses who many times have to work and make decisions on their own in the absence of doctors. This can be done by empowering the nurses with complex skills and competencies. Furthermore, there should be support from mentors, nurse managers and

specialist nurses and doctors, who can assist these nurses to better their skills and provide opportunities for debriefing, which is important for nurses working in isolation (Issues Paper AARN, 2002-2003).

Another study (Ingersoll et al., 2002) shows that there is need for retention strategies to support nurses in professional development, specialty training and provide opportunities for nurses to take on educator roles. One way of increasing access to professional training and development or specialty training would be to increase distance education courses in nursing programs coupled with mentorship from senior professionals like specialists and other senior doctors.

Poor working conditions

Working conditions were consistently highlighted by all the HRH as the major challenge they are faced with as they work in the rural areas. This is evident in the workload due to the high burden of disease, inadequate equipment like blood pressure machines which are either broken or not available, water shortage, electricity cuts which results in them not conducting vital signs and other things that requires use of electricity, masks, delays in delivery of medicine and other supplies, lack of infectious disease control measures, poor supervision and management in deep rural clinics, and broken referral systems. The working conditions are a major factor that contributes to HRH decision to leave the rural areas. According to Kotzee and Couper, South African doctors in rural Limpopo highlighted working conditions as one of the themes in response to which interventions would retain them in rural areas citing examples like ensuring career progression, improving referral systems, ensuring availability of essential medical equipment and medicines, and strengthening rural hospital management. Similarly another study conducted in rural south Africa shows that workload was highlighted as one of the factors that influences HRH to leave the rural areas (Reid, 2004). A study in rural Vietnam found that difficult working conditions were some of the discouraging factors for the HRH working in rural Vietnam (Barnighausen and Bloom, 2009). A WHO study found that health professionals working in the public sector in Cameroon, Ghana, South Africa,

Uganda and Zimbabwe highlighted “working conditions” as a key factor that influences their migration decision (WHO, 2004).

Working conditions is a broad term which encompasses most of the challenges which faces HRH in the rural areas, hence pushing them away to urban areas and other destinations like overseas. However, there are no specific strategy initiatives by the government to address the challenge of working conditions much as it’s the backbone of health service delivery in the rural areas. This calls for a review of the available strategy initiatives aimed at attracting and retaining the HRH in the rural areas.

In order to ensure retention of health professionals in the rural areas, there is a need to address the challenges they are faced with on a daily basis. The HRH expressed their desire to work in the rural areas but only if the conditions were made better. They highlighted the need to improve the working conditions which include improved management and supervision, availability of supplies and equipment, infectious disease control measures, reducing the workload by attracting more HRH in rural areas, and ensuring the referral systems are up and running.

5.3. Government strategies

The study explored each of the following national strategies in relation to their effect in addressing the challenges faced by HRH in the rural areas. The findings are discussed as below:

5.3.1. Rural Allowance

Financial incentives, particularly the Rural Allowance, are crucial in attracting health professionals to the rural areas. Salaries and benefits, however, have a mixed effect on the staff job satisfaction and retention (McNeese, 1999) According to Cushman, (Cushman et al., 2001), salaries and benefits appeared as the most mentioned attributes which are positive contributors to retention. However, Blegen, (Blegen, 1993) shows the need to provide nurses with more rewards as opposed to providing them with only economic rewards to ensure job satisfaction and rewards. The results of the study showed

a major concern on the criteria used in distribution of Rural Allowance. The doctors are entitled to between 18% to 22% rural allowance and professional nurses 8% to 12%. However, most of the HRH felt that there are some concerns in the administration of rural allowances since some of their colleagues working in the outskirts of the major cities also receive the same allowances as those working in rural and deep rural areas. They therefore expressed their concern on the criteria used in the definition of the settings and consequently the administration of the allowances. The HRH saw the need for proper re-definition of the term “rural” and “deep rural”, to ensure that remoteness of the setting is taken into consideration. Lack of a clear distinction between semi-rural, rural and deep rural revealed a major weakness in the implementation of the rural allowance. These findings are consistent with a recent study conducted in North West province of South Africa. The study shows that there was a problem with the implementation of rural allowance which resulted in information gaps, uncertainty, and room for subjective interpretation. According to the study, the implementation lacked proper definition of the term “rural” which meant that the provincial health departments were left to translate the term “rural” which resulted in discrepancies as to what rural was across the provinces. Additionally, remoteness of the setting wasn’t ascertained hence the HRH working in the deep rural are entitled to the same rural allowance as those in semi-rural areas (Ditlopo et al., 2011). Furthermore, HRH expressed the need to revise the rural allowance to a significant percentage which will make it worthwhile working in rural and deep rural areas. This affirms the results of other studies, e.g. a study that compared the impact of different policy interventions across three countries, Kenya, South Africa and Thailand (Blaauw et al., 2010). The study showed that financial incentives are one way of attracting HRH to work in rural areas “but only if they are fairly large”. The study showed that a 30% rural allowance would see 75% of South African nurses and 79.8% of Kenyan nurses prefer to work in rural areas. A study by Reid which sought to monitor the effect of the new rural allowance in South Africa, showed that the initial rural allowance, introduced in 1994, influenced approximately a third of the health professionals to work in the rural areas. Reid however noted that financial incentives are just one of the factors that influence their decision to work in rural areas. In the study, the health professionals highlighted other factors as career development, job satisfaction, and educational

opportunities as important factors especially for young professionals (Reid, 2004). Moreover, a study by Ditlopo et al. suggests that, attracting and retaining HRH in the rural areas requires a combination of both financial incentives and non-financial incentives (Ditlopo et al., 2011). The Indonesian Government used a combination of community service, preferential access to training and financial incentives to HRH working in rural areas. The doctors deployed in rural areas earn double the salary of those working in urban areas (Chomitz, 1997).

Occupational Specific Dispensation

The OSD implementation has been welcomed by HRH working in the rural areas. The strategy has been effective in many ways, ensuring that the HRH in the rural areas are remunerated translating into job satisfaction. OSD has also provided job security by ensuring that HRH would not leave a rural area to look out for a better salary elsewhere. Furthermore, OSD has been effective in motivating the health professionals working in rural areas, as the study found most of them were happy with their salaries. These findings are consistent with a study (Ditlopo et al., 2013) conducted in North-West and Gauteng provinces, which shows that the OSD initiative was welcomed by the HRH interviewed who said that it was a good initiative by government. The implementation resulted in many HRH from the private sector moving back to the public sector as it resulted in better pay. With OSD, it will be easier to fill up the specialist posts at regional hospitals that will in turn assist in training of community doctors seeking to migrate to urban settings due to specialties. Contrary to other studies (Versteeg and Couper, 2011) that had declared OSD as an anti-rural incentive which only rewards specialties, the study findings show that the doctors are happy with OSD saying there is a very small difference between what the rural doctors are earning and the specialists.

Sufficient evidence exists to show that financial incentive programs for return of service is one effective way of attracting and retaining HRH in the rural areas, hence alleviating the shortage of HRH in the rural areas. One of the studies reflects the findings of 43 financial incentive programs, out of which 34 programs are located in the US, and the rest in other developed countries like Japan, Canada, and New-Zealand while one of the

studies was conducted in South Africa. These programs entail health professionals signing a contract to work in a rural setting in exchange for financial gain. This strategy results to an increase in the number of professionals desiring to work in the rural areas from urban setting and also decreases the number of the health professionals leaving the rural areas (Barnighausen and Bloom, 2009).

Addressing the issues surrounding the implementation of financial incentives would see an increasing number of HRH desiring to work in rural areas. As a result this will diminish the reasons for non-retention in the rural areas which include salaries and benefits, work-load, isolation, and lack of professional networks. Financial incentives are thus an important component of attraction and retention which would adequately address some of the challenges of HRH working in the rural areas as highlighted above.

Recruitment of foreign doctors

The recruitment of foreign doctors has been one of the most effective ways of dealing with the challenge of HRH shortages in rural areas. The local doctors have a high turnover and the general feeling is that most South African doctors don't like to work in rural settings. The study found that foreign doctors were preferred to local doctors as they stayed longer and assist the professional nurses and community service doctors, by giving them orientation and the professional support they require.

However, as previous studies suggest (Couper, 2003), this should only be viewed as a short-term measure. There should be more efforts to ensure that "appropriate for rural" doctors and nurses are produced in order to cope with the current staff crisis. According to Couper, this translates to an overhaul in student selection processes, the medical schools curricula, and development of incentives to those working in rural areas.

The recruitment of foreign doctors can also be used as an attraction strategy to attract more HRH in the rural areas. According to AHP recruitment of foreign doctors should not only be viewed as a short term solution, since the foreign doctors can support the rural health facilities to an extent that they become self-sustainable. This would call for

effective management to be in place, which would then see many local health professionals attracted to these facilities since they have an opportunity to be supervised and mentored by foreign doctors (www.ahp.org.za/news-detail/293). This affirms the findings of the study where the community doctors reported that one of the factors that contribute to their decision to leave the rural areas after their one year of community service is lack of experienced doctors, who would help them nurture their skills by mentoring them.

Community Service.

The doctors on community service in rural KZN welcomed the move by the government to introduce community service as a way of addressing the crisis in rural clinics, which is a reflection of the success of the initiative. The doctors reported that they feel it helps them to get some confidence, enhances their professional skills and makes them appreciate exposure to rural health care. This relates to findings from other studies, (Reid, 2001), which shows that 64% of South African doctors on community service felt that “they develop professionally and gain insight as practitioners”. A similar study from Ecuador (Cavender and Alban, 1998) reported 94% of health professionals found the community service “rewarding both personally and professionally”. This positive feedback confirms that this initiative aimed at addressing the current crisis of staff shortage has been effective.

However, community service doctors feel that a lot needs to be done especially to improve the living and working conditions suggesting that the lack of equipment is a big challenge, since most of the existing equipment is old and out-dated. The community service doctors requested that things be upgraded to their “level of technological abilities”, and provided with more professional support especially from specialists.

There needs to be more emphasis on having more community service doctors in rural areas, considering the shortage. Most of the doctors would prefer tertiary and regional hospitals, as opposed to rural hospitals. This means that there’s competition as most health professionals want to be posted in big towns, where they can further their skills by

getting specialized training, leaving the rural areas to the ‘unlucky’ few. Further, some of the professionals are obligated by conditional scholarships, which dictate that they should go back and serve their term in rural areas.

One way of strengthening community service, would be to combine it with financial incentive for return of service. Sufficient evidence exists, which shows that financial incentives for return of service is an effective strategy in attracting and retaining HRH to rural areas (Barnighausen and Bloom, 2009).

Recruitment of foreign doctors and community service strategies has worked to a certain extent to reduce the workload in the rural areas. However in light of high burden of disease, there is need to attract more foreign and community service doctors to rural KZN. Proper implementation of these strategies will result in addressing issues like emotional burnout, stress and frustrations which arises from increased workload.

5.4. Factors resulting in attraction and retention of HRH in the rural areas

In-order to develop appropriate strategies to deal with the challenges facing the HRH in rural areas, there must be an understanding of factors that influence their decisions to accept and work in the rural area, which can be considered to be “attracting factors”. The responses given by the HRH as the reasons why they chose to work in rural KZN affirms the findings of previous studies (Couper, 2007; De Vries 2003; Playford ,2006; WHO, 2010).

5.4.1. Rural background

Some of the health professionals working in rural KZN were born and brought up in rural areas. Hence coming back to work in rural area can be best described as a sense of returning home to one’s roots, a place where you can identify with people and family, a familiar context. For most of them coming back to work in the rural area is in a sense, giving back to the community that nurtured and supported them while they were growing up. Furthermore, some take it as an opportunity to make their home area a better place by ensuring they are using their skills and experience to improve the quality of health care

given to their people. In doing so there is a sense of maintaining the connection with the community, while working in urban areas would give one a sense of ‘disconnection’.

5.4.2. Passion for the community

Passion to serve the community is yet another reason why some HRH have chosen to work in rural areas. These health professionals have a special drive to work with the communities and more specifically in rural areas, they find it more fulfilling to make a difference in disadvantaged communities.

5.4.3. Family reasons

Family reasons were provided as another reason for some health professionals to work in rural areas. The elderly nurses for instance are well established in rural areas having worked here for many years, and don’t see the need to relocate. Some of HRH have family around which makes moving to urban areas resulting in a disconnection from family since one has more quality time with the family, a safe environment for children, and a network of friends which is also appreciated in a rural setting.

5.4.4. Specialization/training opportunities

Specialization was provided as one of the main reasons some HRH have chosen to work in rural areas. HIV/AIDS prevalence in rural KZN is high which has seen some ongoing research on this issue. Some nurses and foreign doctors move to the area to conduct research, which to them translates to being more competitive in the job market.

Training opportunities were quoted as another reason for choosing to work in rural areas. Some health professionals felt that it takes longer to get an opportunity to further ones studies in urban areas since, almost everyone else wants to study, which means that you have to be put on a waiting list until an opportunity arises.

A good understanding of these factors, that influences the HRH to work in rural area, would prompt policy makers to come up with policy initiatives that would address these factors. For instance, improved and conducive working and living conditions would see

many of the HRH with a rural background desire to come back to their communities and would be more happy to serve their communities. It would also encourage and attract other health professionals who would like to acquire rural work experience.

5.5. Limitations of the Study

Although the research was carefully prepared and conducted there were some unavoidable limitations. The talent management theoretical framework (Strategic Framework for Success, 2010) was adopted in the absence of a more appropriate framework on management of scarce skills. Additionally, there are very few evidence-based studies on how national strategies are impacting on the challenges of HRH in rural areas. Therefore, there was limited literature on the topic, which suggests the need for future research in this area. The study was conducted in one of the sub-districts in KZN which may limit its generalisability to other settings.

5.5. Conclusion

This chapter entails a detailed discussion based on the findings on how adequately the national strategies are addressing the challenges facing the HRH in rural areas in view of other previous studies. The summary of the study findings and recommendations for future research are contained in the following chapter.

CHAPTER 6 - SUMMARY OF FINDINGS AND RECOMMENDATIONS

6.0. Introduction

This chapter presents a summary of the study findings on how adequately the national strategies have addressed the challenges faced by the HRH in the rural areas, by indicating whether the respective strategies have had a low, medium, or high impact. Moreover, the chapter presents recommendations guided by the talent management theoretical framework on other interventions that should be considered to overcome these challenges, which are consistent with the WHO global policy recommendations and applicable to the South African context.

6.1. Attracting strategies

6.1.1. Rural allowance.

The study findings show that rural allowance has had a low impact in addressing the challenges facing the HRH in rural areas due to its poor implementation, which lacked a clear definition of the term 'rural' and 'deep rural'. This allowance which should be an incentive for HRH working in hardship areas is also received in peri-urban areas hence the HRH felt that the incentive doesn't achieve its objective to incentivise rural practice.

6.1.2 Occupational Specific Dispensation

The implementation of OSD has seen a high impact in addressing the challenges facing the HRH in rural areas. The HRH are happy with its implementation which has resulted in job satisfaction and hence motivation in their work. Some HRH have moved from private sector into public sector hence it has worked as an attraction strategy. Moreover, the HRH expressed that it translates to job security as the salary for each grade is same across the country, hence one would not want to move from rural to urban areas with a reason of looking for a better remuneration, which means that it is working at retaining the HRH in rural areas. The OSD has resulted in addressing some challenges facing the HRH which include salaries and benefits by providing a good remuneration, and also

workload which would reduce as a result of attracting HRH from private sector back to public sector. Retaining more HRH in rural areas would also get rid of isolation and increase professional networks.

6.1.3. Recommendations on attracting strategies

The challenge of salaries and benefits has been addressed to a large extent especially due to the introduction of OSD. However, in order to attract more HRH to rural areas the following should be done:

Rural Allowance: There is need to re-visit the administration and implementation of the rural allowance in-order for the HRH to feel they are incentivised accordingly. This can be achieved by a proper re-definition of the term “rural”, to include semi-rural, rural and deep rural and then allocating distinctive allowances to the respective categories. Additionally, rural allowances and deep rural allowances should be allocated a significant percentage which justifies working in hardship areas under poor conditions. There is also need to review the rural allowance to include other categories of the nursing professionals like the enrolled nurses and the staff nurses. The shortage of HRH in rural areas results in work load, which would require the enrolled nurses and the staff nurses to work as much as the professional nurses, under constraining resources and in poor living and working conditions.

A significant raise in the rural allowance for those working in rural and deep rural areas as well as introducing rural allowance to enrolled nurses and staff nurses would retain the HRH working in rural areas and consequently influence their decision to work in rural areas. This would also result in more HRH in the urban areas desire to come to rural areas.

Occupational Specific Dispensation: there is need to review OSD, making it an incentive for the HRH working in rural areas. Currently, the health professionals in rural areas are receiving OSD just like their colleagues working in urban areas. The HRH Strategy recommends developing a financial incentive structure through OSD to attract

and retain HRH in rural and urban areas (MoH HRH, 2011). However, there is a greater need for HRH in rural areas than in urban areas, hence the need to prioritize the implementation in rural areas first in order to use it as a strategy to attract and retain HRH to rural areas.

Working conditions according to the study findings featured as the major challenge facing the HRH. Effective implementation of financial incentives (where HRH in rural areas are remunerated significantly higher than their urban counterparts) would act as a trade-off for most HRH where they would make a decision to work in rural areas despite the challenge of work conditions.

6.2. Selecting strategies

6.2.1. Recruitment of foreign doctors

The strategy by the government of recruiting foreign doctors to work in the rural areas has had a high impact in addressing the challenges facing the HRH in rural areas. This is especially due to the high turnover with the local doctors. The foreign doctors share their skills and experiences with the local HRH, who expressed they find it very important for their professional development. This ensures that professional networks are formed, which addresses the challenge of professional isolation. Further the presence of foreign doctors means shared workload which would ultimately reduce stress and burnout in the HRH.

6.2.3 Community Service

Community Service has had a medium impact in addressing the challenges facing the HRH in rural areas. This is because most of the community service doctors prefer to be posted in tertiary and regional hospitals leaving the rural areas to the few who are mostly bound by work-back scholarships. the strategy works in reducing the work load in the clinics but only to a certain extent, since they are few in number. A greater impact would be achieved if there is prioritization in sending most of the community service doctors to the rural areas.

6.2.3. Recommendations on selecting strategies

Recruitment of foreign doctors

Although the recruitment of foreign doctors is a great strategy, which works to alleviate the shortage in rural areas, the government should ensure an increased production of local HRH. Previous studies suggest (Couper, 2003), that foreign doctors should only be viewed as a short-term measure. There should be more efforts to ensure that “appropriate for rural” doctors and nurses are produced in order to cope with the current staff crisis. According to Couper, this translates to an overhaul in student selection processes, the medical schools curricula, and development of incentives to those working in rural areas.

Community service

There is need to prioritize having more community service doctors in rural areas, considering the shortage. Most of the students would prefer tertiary and regional hospitals, as opposed to rural hospitals, leaving the rural areas to the few who would want to be there by choice. The strategy needs to be revisited to ensure that there’s more emphasis to post the majority of community service doctors to rural health facilities. This affirms the HRH strategy recommendation to ensure that the allocation of community service professionals is focused more on rural areas, with limited placement done at central hospitals (MoH HRH Strategy, 2012/13-2016/17).

Moreover, the rural hospitals and clinics should also be upgraded to ensure that the living and working conditions are favourable for these community service doctors. This can also be combined by other types of incentives to ensure that more HRH are attracted in rural areas.

Other Selection Strategies

Recruitment for rural practice

One of the recommendations of WHO, to improve retention of health professional in rural areas, was to offer educational support. This can be done by targeted admission policies, building clinical training facilities outside of the major cities, and exposing the students to rural clinical experience (WHO, 2010). By having training facilities in rural areas, this will achieve the objective of targeted and preferential admission policies and exposure to rural clinical experience, as this ensures that the students enrolled are from the nearby communities, who would be happy to serve their communities and make them a better place.

Rural scholarship schemes

Further, another effective strategy of overcoming staff shortages is the rural scholarship schemes, for instance the Umtombo youth located in the northern KZN. The government should borrow a leaf from such successful initiatives and consider investing in rural scholarship schemes for rural students as they come with a work-back condition which sees the students return to serve their communities.

In light of the above, the HRH strategy outlines the government's strategic priorities to design and implement an educational strategy based on WHO guidelines for rural and remote areas. This will be done in partnership with faculties of health sciences (MoH HRH Strategy, 2012/13-2016/17).

The success of the implementation of community service is largely dependent on availability of supportive senior health professionals in rural health facilities. This should be coupled with designing rural career paths and continuous professional development programmes accessible from rural work place, and providing incentives to retain them in the rural areas (Gerritsen, 2010, WHO, 2010, MoH HRH, 2011); (HRH Strategy, 2012/13-2016/17).

6.3 Engaging strategies

The following are recommendations on how to improve engagement of the HRH in the rural areas.

Management and supervision

The results of the study shows the need to position within the rural health facilities people with the appropriate qualifications and who also have the passion to serve the community as this would ensure that they motivate the health professionals to work with the same determination. This calls for investing in management training courses and effective supervision processes, which results in improved performance and productivity (WHO, 2010).

Communication/ Feedback channels

There is need to have proper communication and feedback channels between the management and the staff. This would ensure that no-one is left to deal the situation alone. The study reveals that the communication channels are broken and that is why for instance the equipment used in the clinics would be broken for months, as well as causing delays in delivery of supplies. This calls for strengthening in communication and feedback mechanisms.

Community involvement and engagement

The community needs to embrace and accommodate the HRH working in the rural areas. This would get rid of outsider bias and make them feel welcome and appreciated for what they do for the community. The policy makers need to involve the community leaders in their initiatives as this would have an impact on the attitude of the community towards the health professionals.

Professional networks

One of the challenges faced by the health professionals working in rural areas is professional isolation. There is a need to come up with professional networks for the HRH in rural areas. This would ensure that they get to reflect on their practice and the interaction would make them learn from each other hence improving their confidence and proficiency.

The recent implementation of the District Specialist teams by the government is an effective way of outreach support by other senior health professionals and specialists from the district to the sub-district and rural settings. The impact of this initiative can be fostered by continuous review of the strategy to ensure that its achieving its intended objective.

6.4. Developing strategies

Career development is a challenge facing health professionals in rural areas. Some of the HRH who expressed their intention to leave would do so due to the unavailability of training opportunities. There is need for medical schools to embrace the use of distance learning especially to target the health professionals working in the rural areas. There should also be some career development interaction between specialists and the rural health professionals to ensure that they can still pursue their specialty aspirations whilst in rural settings. The professional nurses working in rural areas mostly find themselves making big decisions pertaining to what should be done to the patients, due to unavailability of doctors. There is need to empower these nurses by organizing training workshops, which would better their skills and give them more confidence in their decision making. The recently implemented District Support Specialist teams is an effective way of fostering this interaction. Hence there's need for continuous review of this initiative to ensure that it achieves this objective.

6.5. Retention strategies

In-order to achieve the intended intention of adequately addressing the challenges facing the HRH in rural areas, the following should be taken into account:

Improving the working conditions

There is an urgent need to formulate strategies to improve the working conditions in the rural areas, as this is what pushes away many HRH who would have opted to work in the rural areas. Most of them showed dedication to serve their community, but are frustrated by the working conditions and these frustrations can only go on for a short while. Improving the working conditions would see many resolve to stay in rural areas. This can be done by ensuring sufficient supply of the basic equipment like blood pressure machines, masks, and thermometers. There should be timely and sufficient delivery of the clinical supplies. Furthermore, there should be infectious disease control measures in place. Good management and supervision need to be enforced to make the HRH feel recognized and appreciated for their work. Finally, referral systems should be restructured in order to ensure a proper link between the rural doctors and the specialists.

Improving the living conditions

Furthermore, the government should embark on policy initiatives aimed at improving living conditions in the rural areas. This can be done by investing in rural developmental projects that provides safe and good housing, sufficient and consistent water supply and electricity, internet access and recreational facilities.

The WHO reiterates that improving the living and working conditions of the rural setting by equipping and refurbishing the rural clinics and hospitals could be an expensive activity. Similarly changes in management styles and implementing supportive supervision may be an expensive undertaking as it means investing in management training courses and effective supervision processes, however ,long term benefits will be realized. Eventually improving working conditions results in improved performance and productivity of health professionals and consequently the performance of health systems is improved (WHO, 2010).

6.6. Conclusion

The national strategy initiatives aimed at addressing the challenges faced by HRH are working to a certain extent. The OSD has been effective in addressing the problem of salaries for the HRH. Rural and Scarce skill allowances need to be reviewed to ensure proper administration which will result in allocating significant percentages that rewards rural and deep rural practice. Community service and recruitment of foreign doctors are good strategies aimed at increasing the numbers of HRH in the rural areas hence alleviating the work-load, however, in light of the high burden of disease, there is need for proper implementation of these strategies to ensure they attract more HRH to rural areas. The study findings show consistently that poor working conditions and poor living conditions are major challenges facing HRH in rural areas. So there are no specific strategies aimed at addressing these challenges.

The strategy initiatives by the government are not comprehensive and are only limited to one just one or two challenges e.g. the financial incentives like rural allowance and OSD which are aimed at addressing the problem of salaries and benefits. No single strategy intervention will provide a lasting solution to all the challenges facing the HRH in the rural areas. In-order to overcome specific challenges facing HRH in rural areas, this study suggests a more comprehensive approach in the design and implementation of national strategies. Strategies should be informed by evidence based studies to ensure that HRH challenges are addressed adequately. To ensure effectiveness of the national strategies, the study suggests the need for bundles of interventions e.g. community service combined with financial incentives, among others. This will aid in addressing more than one challenge simultaneously. Furthermore, our study highlights the need for a constant review of the impact of the strategies against the challenges they are designed to mitigate, in order ultimately to reduce the shortage of HRH in rural areas. The study recommendations provide a frame of reference to policy makers on how to improve existing strategies to ensure that they address the challenges facing the HRH in order to improve health care in rural areas.

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