

## **Perspectives and experiences of healthcare workers on the National Health Insurance at tertiary hospitals in the Limpopo Province, South Africa**

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### **Abstract**

*South Africa adopted the National Health Insurance (NHI) scheme as a mechanism to achieve universal protection of its citizen from the hardships associated with seeking care. Healthcare workers are responsible for the implementation of the NHI. Therefore, it is imperative to hear their inputs. Hence the purpose of the study was to describe the perspectives and experiences of health care workers with regard to the roll-out of the NHI at Pietersburg-Mankweng Academic Hospital, in Limpopo Province. This was a cross-sectional study based on a self-administered questionnaire. Of the 363 questionnaires issued, 253 were completed. The results showed that a greater proportion (64%) of the participants had knowledge of what the NHI is about, but 48% of the participants did not know about the policy contents of NHI; while 38.7% indicated their preparedness/readiness for its implementation. Participants' response regarding the perceived challenges during the implementation of the NHI indicated that the most common challenges were administrative issues (30%), funding (21%) and personnel (11%). In conclusion, the majority of the participants at knew about the NHI; although a good number did not understand the NHI policy. Their lack of knowledge about the NHI policy as the main driver of the reform is of grave concern. With regard to readiness for implementation of NHI, it is clear that a lot should be done to get health care workers and the facilities ready. There is a need for funds for infrastructure, training, and activities to increase buy-in as well as to address the identified challenges.*

**Key words:** Universal health coverage, National health Insurance, healthcare workers

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## Introduction

Reform of health care facilities is always aimed at achieving fair and equitable distribution of health care resources to the community. The South African health sector like in other countries such as Brazil and the United States of America has undergone some reforms with the aim of promoting access to health care (Patient Protection and Affordable Care Act Health-Related Portions of the Health Care & Education Reconciliation Act, 2010; Gragnolati et al, 2013). It has been shown that the current reform in South Africa is to have disparities in quality service delivery between the public and private sector reduced. Hence the White Paper on National Health Insurance was formally enshrined in the constitution of the country on December 2015 (National Health Act, 2003) with the intent to close the existing gaps in health care delivery. To ensure successful implementation of this law, it is essential that environments, where the health reform occurs, should be thoroughly prepared.

With regard to the NHI, perceptions were sought from the society at large including healthcare workers (HCWs). The HCWs were shown to have an influence on recipient decision to access health services, and this was shown in their attitude (good/bad), the use of bad language and also poor facilities in which they work (Juma & Manongi, 2009). A study conducted in South Africa amongst PHC Nurses in Johannesburg indicated that the nurses' attitudes are positive towards the NHI, but they also said that buy-ins, stakeholder engagement, and proper planning need to be in place for the successful implementation of the project. However, other studies (Amandla, 2009; Ramjee and McLeod, 2010; Surrender et al, 2015) highlighted mixed responses regarding supporting the implementation of the NHI by general practitioners. Some of them do not support the NHI because they viewed it as detrimental, some stated that they would support it due to the envisaged personal benefits and achieve universal coverage for quality health care in South Africa, while others feel that there is a need to commit to open engagement and debate before its implementation.

Studies conducted in South Africa and Nigeria also indicate that knowledge about the NHI has a potential impact on its implementation. More than half of the HCWs in these studies did not know that membership to NHI would be compulsory, while over two-thirds believed that the NHI would not provide adequate cover compared to current medical schemes. Regarding the main objectives of NHI, over half of the HCWs were knowledgeable whereas 44.3% were unaware of the proposed socio-economic benefits of the NHI (Bezuidenhout, Matlala, 2014; Dutta, Hongoro, 2013). Another study conducted in South Africa amongst civil servants from the health and education sectors in four of South Africa's nine provinces (Gauteng, Western Cape, KwaZulu-Natal and North West) found that 23.7% of the participants (lower skilled and skilled) stated lack of information as an important obstacle to enrollment for the scheme (Govender et al, 2013).

In another study conducted in Nigeria on knowledge and attitude of HCWs towards the NHI, half of the participants knew that the scheme aimed at providing access to quality healthcare for all Nigerians. Almost all (98%) knew that it aimed at protecting families from financial hardships due to a sudden illness. Furthermore, concerning knowledge on specific areas of the scheme, 73% knew the various routes one can enroll into the scheme, 75% knew

the various services covered by the NHIS, and while 97% knew the correct premium they are to pay as employees (Ijeoma, 2014).

To date, little is known about the views of health care professionals in public health services such as the Pietersburg-Mankweng Academic Hospital, on the NHI in South Africa. Therefore, the aim of our study was to assess healthcare workers' perspectives and experiences on the NHI at Pietersburg-Mankweng Academic Hospital.

## **Methodology**

### **Design**

A cross-sectional study design was employed to conduct a survey with HCWs in the four sections of the hospital, namely, nursing services, clinical services, allied health and emergency medical services. The study population included all HCWs from the four sections of the hospital. The estimated population of the study was 2312 employees. Proportionate stratified random samples of HCWs was done according to the various categories. Based on the most recent numbers of a health care professional as of February 2014, there was 1473 nursing personnel, 404 clinical personnel, 311 allied health personnel, 124 emergency medical services personnel. The study sample size at 95% confidence was 330 healthcare workers. A 10% was added to bring the total sample size to 363. Sample size proportions per stratum were as follows: nursing personnel=231, clinical personnel=63, allied health personnel=49 and emergency medical services=19.

### **Data collection**

A self-administered structured questionnaire was designed to collect data. The questionnaire had two sections; one section with seven questions concerning the background of respondents, and a section with twenty 22 questions concerning respondents' views and perceptions on NHI. The tool was pre-tested on 15 HCWs in a district hospital; these HCWs did not form part of the main study. At the study site, the researcher conducted a briefing with the participants to explain the purpose of the study and the study procedure. In addition, the researcher distributed information leaflets which further explained the study and its purpose. The questionnaires were distributed to the HCWs who were told that they had about two weeks to complete the questionnaire and to drop the completed questionnaires in boxes provided as pre-arranged with the managers of each of the four categories of HCWs. The data collection process took two months.

### **Data analysis**

After receiving data from the field, the researcher checked the questionnaires for completeness. Information from the questionnaires was captured on Excel spreadsheet which was later cleaned, coded and then imported into Stata for analysis. Descriptive statistics were determined and presented in absolute frequencies in the form of raw numbers, relative frequencies, and percentages. Chi-Square test was used to test for association between variables. The level of significance of all statistical tests was set at a p-value of less than 0.05. Knowledge questions were aggregated and scored; an achievement of 75% or more was

regarded as adequate knowledge; while scoring less than 75% was considered inadequate knowledge level.

**Ethical considerations**

Ethical approval was obtained from Medunsa Research and Ethics Committee of the University of Limpopo and institutional permission was obtained from Limpopo Department of Health and Pietersburg-Mankweng tertiary Hospital complex. Participants provided verbal consent.

**Results**

Three hundred and sixty-three (363) questionnaires were distributed, but only 255 were returned, and two were not completed, giving a response rate of 70%. About a third (29%) of the participants were in the age group 30-39 years, 20% were in the age group 40-49 years. Most (79%) of the participants were female, over half were nurses (57%) followed by allied healthcare workers (19%). Ninety-five percent of the participants had tertiary education and only 5% had secondary education.

**Respondents’ knowledge of National Health Insurance scheme**

The results indicate that a greater proportion (64%) of the participants knew what the NHI is all about, of these, only 37% had detailed information on how their facility is involved in its implementation. Regarding the NHI policy contents, 48% of the participants did not know about the policy contents of NHI ( $p < 0.05$ ). A greater proportion of allied (62%) and doctors (63%) did not know about the policy contents of NHI compared to emergency services (40%) and nurses (40%). There was no statistically significant difference between knowledge of NHI and all selected demographics ( $p > 0.05$ ).

**Table 1: Association between knowledge of NHI and selected demographics**

	Total	Have adequate knowledge NHI		Have inadequate knowledge of NHI		p-value
		Freq.	%	Freq.	%	
<b>Employees Categories</b>						
Allied	48	33	69	15	31	0.376
Clinical	41	29	71	12	29	
Emergency	20	14	70	6	30	
Nurses	144	85	59	59	41	
<b>Gender</b>						
Female	201	125	62	76	38	0.347
Male	52	36	69	16	31	
<b>Level of education</b>						
Secondary	13	8	62	5	38	0.858
Tertiary	236	151	64	85	36	

Unspecified	4					
<b>Age (years)</b>						
20-29	43	24	56	19	44	0.151
30-39	72	50	69	22	31	
40-49	51	32	63	19	37	
50+	30	14	47	16	53	
Unspecified	57					

**Respondents’ perceptions about NHI implementation readiness**

When asked about their readiness for the implementation of NHI, less than 40% of the participants stated that they were ready, over 60% were either not ready or unsure (Table 2). There was a significant difference in views based on professional categories. About (60%) emergency services personnel, (48%) of the nurses, 25% of allied personnel, and 12% of the medical staff believed that they were prepared for the implementation of the NHI in their facilities. When probed about the ability of their facility to provide services for the tertiary level of care, more than half (52%) of allied personnel said that all services would be provided at their facilities. However, over 60% of emergency care services personnel, medical doctors, and nurses said that only some services might be provided. Finally, when asked to express their views on the readiness of their facilities, there was not statistically significant difference as the consensus from approximately 40% of all respondents was that their facilities are ready to deliver some services.

**Table 2: Views on implementation readiness of NHI at facility level**

Questionnaire Statements	Options						p-value
		N (%)	Allied n(%)	Doctors n(%)	Emergency personnel n(%)	Nurse n(%)	
<i>As a health care worker in your opinion would you say you are prepared for the implementation of the NHI in your facility?</i>	Yes	98 (38.7)	12(25)	5(12)	<b>12(60)</b>	<b>69(48)</b>	0.001
	No	77 (30.4)	14(29)	<b>18(43)</b>	6(30)	39(27)	
	Unsure	78 (30.8)	22(46)	<b>19(45)</b>	2(10)	35(25)	
<i>Which of the health care services listed for tertiary level of care you think must be provided in Tertiary Hospitals?</i>	All services	74 (29.3)	<b>24(52)</b>	12(29)	7(35)	31(22)	0.001
	Some services	176 (69.6)	22(48)	<b>30(71)</b>	<b>13(65)</b>	<b>111(78)</b>	
	Unspecified	3 (1.2)					
<i>In your own view do you think your facility will be ready to provide the services required as and when the NHI is implemented?</i>	Definitely yes	59 (23.3)	13(27)	8(19)	9(45)	29(24)	0.41
	Yes but not all	99 (39.1)	<b>21(44)</b>	<b>16(38)</b>	<b>8(40)</b>	<b>54(45)</b>	
	No	27 (10.7)	5(10)	8(19)	2(10)	12(10)	
	Not sure	46 (18.2)	9(19)	10(24)	1(5)	26(22)	
	Unspecified	22 (8.7)					

Regarding the perceived challenges during the implementation of the NHI, most of the respondents said administrative issues (30%), funding (21%) and personnel (11%) are common.

## Discussion

Over two-thirds of the HCWs had adequate knowledge about the NHI and over a third (37%) had detailed information on how the hospital was involved in its implementation. Consistent findings were reported in a study conducted in another academic hospital in South Africa where over half (54.6%) of the HCWs were knowledgeable about the NHI (Bezuidenhout and Matlala, 2014). Although the HCWs had knowledge about the NHI, almost half (48%) did not know the details of the policy content. There was no statistically significant difference between the different categories of HCWs and knowledge of the content of the policy even though more (63%) doctors and allied health professionals did not know about the policy contents of NHI compared to emergency services and nurses (40%). Sekhejane (2014) reported consistent findings. It is important for the South African government to understand that little is known and understood by the service providers and users; thus it is important that the government ensure that both users and providers understand the policy.

Regarding HCWs preparedness for the implementation of the NHI, this study found that the majority of the participants felt that themselves and the facility were not ready for the implementation of the NHI. More emergency services personnel (60%) and nurses (48%) believed that they were prepared for the implementation of the NHI compared to allied personnel (25%) and medical staff (12%). A previous study conducted in South Africa amongst general medical practitioners (GPs) in private practices to assess their perceptions regarding the understanding and the costing of the NHI, found ambivalent opinions about the NHI which are consistent with our study. The study found that 47% of the participants took a neutral stance; 21.5% supported the NHI and 32.5% did not. The GPs were uncomfortable with the lack of clarity and control of the risks with NHI (Moosa, 2012).

With regards to the readiness of the facility to provide a tertiary level of care services, over two-thirds of the emergency care services personnel, medical doctors, and nurses some services may be provided. Overall, about 40% of all HCWs were of the opinion that their facility was not ready to deliver to implement the NHI. Similar findings were reported in another study conducted in South Africa, Kwazulu-Natal Province on knowledge, awareness, and readiness of GPs for the implementation of the NHI. The majority of the GPs (64%) were confident that they had the skills rather than the infrastructure, resources and time to participate in the NHI program (Latiff-Khamissa & Naidoo, 2010). While Okaro et al (2010), in a study conducted in Nigeria among radiographers reported that they believed that the NHI would improve healthcare delivery and were willing to participate in the scheme.

The results suggest that the views, perceptions, and knowledge level among HCWs about the NHI is varied and that their expectations, level of preparedness, and willingness to participate are not the same. This calls for tailored interventions to prepare those who are not ready. In the same vein, facilities should be resourced with adequate infrastructure and superstructure to ensure that the NHI implementation is conducted successfully.

As limitations of this study, it should be noted that, in general, perceptual studies are susceptible to both subjective experiences and social desirability bias. Therefore, it may not

be possible to determine accurately whether the participants are truthful. Moreover, the questions were pre-coded with options; this might have swayed the respondents towards the responses listed. Further limitations relate to the study design (cross-sectional study) and the sample size, which is relatively small. Nonetheless, since only a few studies have published on this topic in South Africa and Sub-Saharan Africa, this study has contributed to documenting the views of HCWs surveyed.

### Conclusion

The majority of respondents know about the NHI; although a good number do not understand the NHI policy. Their lack of knowledge about the NHI policy as the main driver of the reform is of grave concern. With regard to readiness for the implementation of the NHI, it is clear that a lot should be done to get HCWs and the facilities ready. There is a need for funds for infrastructure, training, and activities to increase buy-in as well as to address the identified challenges.

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