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RESEARCH

Knowledge, awareness and readiness of private sector doctors practising in the Ethekweni and Ugu districts of KwaZulu-Natal province for the implementation of the National Health Insurance

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Background: The proposed National Health Insurance (NHI) aims to improve quality of care and equity in healthcare financing for all South Africans. Successful implementation requires participation by stakeholders, such as private sector doctors who play an important role in healthcare delivery. A study was conducted to determine their knowledge, awareness and readiness for the implementation of the NHI.

Methods: A cross-sectional descriptive study was carried out by administering close-ended anonymous questionnaires to private sector doctors in the South region of KwaZulu-Natal. Data were analysed using SPSS version 15.0.

Results: The response rate was 70%; the majority were male with 56% of respondents in the age group 41–60 years. Over 68% had satisfactory knowledge about NHI, whilst 24 (3%) had good knowledge (p < 0.05); doctors with satisfactory knowledge indicated their preference for NHI information via circulars and newspapers. Some 64% believed that they have the necessary skills to implement the NHI, but are not completely ready regarding infrastructure and resources.

Conclusions: The majority have satisfactory knowledge, awareness and believe they have the necessary skills to participate in the NHI. However, the government needs to increase knowledge and awareness, and to improve infrastructure and resources in order for effective implementation of the NHI.

Keywords: awareness, knowledge, National Health Insurance, NHI, private sector doctors, readiness

The South African healthcare system can be described as a twotiered system, whereby healthcare is provided by both the private and public sectors.1 The public sector is defined as that part of the health sector which is owned and financed by the state, whilst the private sector is funded by private stakeholders and medical aid schemes.² Considerable disparities exist between the public and private health sectors with regard to accessibility, funding and delivery of health services.1 This unequal distribution of funds is represented by 60% of resources being utilised to serve only 7 million people in the 'for-profit' private healthcare sector and the remaining 40 million South Africans relying on the public healthcare sector, which accounts for 40% of health care funding.1

The public healthcare sector has been unsuccessful in significantly improving the quality of care given to South African citizens. In many areas access has increased but quality has decreased.3 The country is faced with an increasing burden of disease due to the HIV/AIDS pandemic, and there is also a shortage of skilled human resources, with many important staff positions being vacant or frozen in the public healthcare sector.¹ Inadequate funding and poor management of health institutions is compounded by the mismanagement of finance and infrastructure that has not been maintained over the years.³ The rising incidences of HIV and AIDS, 4 and one of the highest rates of tuberculosis globally, are impacting on an already vulnerable system. In addition drug shortages at healthcare facilities, especially AIDS drugs and the ability to access these at affordable prices, adds further pressure on the public healthcare system.¹

The South African public healthcare system is now at a critical stage and intervention is required urgently to prevent it from falling further into a state from which the country does not have the resources to rescue it.4 Although the private sector accounts for 60% of healthcare spending, this sector is also experiencing various setbacks whereby it has to deal with cost escalations, some of which are from over-servicing of patients and from nonhealth-related expenditures such as administration fees, managed care fees and brokerage fees.3 Membership of medical schemes increases annually, normally above inflation rate.3 The high cost of medical schemes has resulted in the total number of beneficiaries declining considerably as a percentage of the population, from 17% in 1992 to less than 15% in 2005.3 In addition, growing out-of-pocket expenses as a result of exhaustion of medical aid benefits have resulted in more patients having to depend on the public healthcare system for health care.1 Furthermore, inefficient and inequitable tax subsidy for medical aid contributions favour those who can afford them, and excludes modest and low-income workers.1

Thus, the dichotomy of the public and private sectors needs to be reassessed in terms of healthcare delivery. It requires a new approach to provide accessible and affordable healthcare to all South Africans. The discrepancies visible in the delivery of healthcare services between the public and private healthcare sectors goes against the basic rights enshrined in the constitution which states that each individual is entitled to affordable and acceptable, quality healthcare services.⁵ Inequities in the distribution of resources between the public and private sectors as well as the challenges faced by the healthcare system at large

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have led the government to advocate a change.³ Problems in the South African health system need to be identified and solutions developed, to which end the government has announced a reform in national health whereby it has advocated the Program of Action, i.e. the government's 10-point plan.³ Included in this plan is the implementation of National Health Insurance (NHI), which aims to provide universal coverage to all citizens and to address inequitable health care in South Africa. The NHI system aims to combine all citizens under one banner for provision of health care, instead of the current two-tiered system of public and private healthcare sectors, which are currently not operating in harmony.¹

The development of a National Health Insurance system is aimed at improving the equity of healthcare financing and enhancing the quality of care for all South Africans. It is envisaged that this system will transform the health system into an integrated, prepayment-based health financing system that effectively promotes the concept of the right to health care for all.¹

The government has stated that National Health Insurance will benefit everyone in the country by improving the public healthcare system and giving all citizens access to the level of care currently reserved for those able to afford private treatment.¹

The NHI is to be phased in a gradual and incremental manner over five years, starting with pilot projects. The development of a National Health Insurance policy requires legislation and strategic planning to ensure its success in South Africa, with decisions to be made regarding which model will be practicable.

The proposed National Health Insurance system will involve the integration and coexistence of various stakeholders to ensure its survival and consequently its success. Therefore the views and perceptions of the different stakeholders, which include the general public and the private healthcare industry, need to be obtained. A study performed by the Health Economics Unit at the University of Cape Town determined the attitudes of the general public to the concept of National Health Insurance. 6 This study showed that there is 'dissatisfaction with both public and private sectors, suggesting South Africans are ready for health system change'. Amongst others there were concerns about 'the affordability of medical schemes and how the profit motive affected private providers' behaviour'. In addition it stated that even though 'South Africans did not appear to be well acquainted or generally supportive of the notion of risk cross-subsidies, there was a strong support for income cross-subsidies'. Further public engagement was 'essential to improve understanding of the core principles of universal pre-payment mechanisms and the rationale for the development of NHI and that public support for pre-payment was unlikely unless there was confidence in the availability of quality health services.6

Not many studies exist on the different healthcare professionals' perspectives on the NHI. The private healthcare sector will face many challenges with the introduction of this system. These challenges include: whether private sector doctors will be willing to work with the government to develop a sustainable National Health Insurance, as well as if doctors will have the necessary logistics, such as infrastructure, time and resources available, and also whether they have the adequate training to implement the National Health Insurance. The opinions expressed will be vital in drafting a policy that will be workable and sustainable in the current South African healthcare climate. Therefore it was decided to undertake a study with the following aim: to

determine the knowledge, awareness and readiness of private sector doctors practising in the South of KwaZulu-Natal (KZN) province for the implementation of the National Health Insurance.

Methodology

Study design, sample and site

A descriptive, cross-sectional study was conducted amongst private sector doctors. The study site extended across two districts, the eThekwini Metro and the Ugu District, i.e. it extended from Isipingo in the south of the eThekwini Metro to Port Edward, the southernmost part of KZN.

Sampling method

A systematic sample was generated in order to ensure a representative sample. This was possible due to the random order of the sample units in the sampling frame. A comprehensive list of private sector general practitioners and specialists practising in the study site was obtained from the KwaZulu-Natal Medical Care Coalition (KZNMCC), a private sector doctor-grouping database, the Medpages directory and the Doctors' Guilds. This comprehensive sampling frame ensured that all medical practitioners practising in the study area were included. From the comprehensive list after deleting duplication of doctors' information, the first doctor was randomly selected; thereafter every fourth doctor was systematically chosen to compile the 100 doctors,

Study instrument

The instrument used was a self-administered close-ended anonymous, coded questionnaire. The questionnaire was divided into sections using variables to obtain demographic data of participants and their specialities, as well as their knowledge, awareness and their readiness for the proposed National Health Insurance. With regard to knowledge the doctors were asked to rate their knowledge of the NHI by ticking appropriately the boxes marked excellent, very good, good, satisfactory, poor, or no knowledge. The question on awareness was simply 'Are you aware of the proposed National Health Insurance system that the South African government intends to implement'; they could answer either 'yes' or 'no'. In terms of readiness the doctors were asked whether they were ready to implement the NHI with regard to infrastructure, resources, time and skills. The options were 'yes', 'no', 'not sure'.

The questionnaire was pilot tested amongst a few doctors in the private sector who were not practising in the study site. The questionnaire was thereafter amended and prepared for the full study. No records of names or contact details of the doctors were kept.

The questionnaire was thereafter filed according to a coding system to further ensure anonymity.

Data collection and analysis

The doctors were contacted telephonically or via their Guild meetings to inform them of the study, explain the details and invite them to participate in the study.

After obtaining consent from the doctors a questionnaire was administered, either by faxing or by personally delivering it to the doctors, depending on doctor preference, or given at the Guild meetings. The doctors were informed that they were allowed to withdraw from the study at any time without suffering any prejudice.

Table 1: Respondents' knowledge of NHI according to gender, age and practice (n = 70)

Demographics	Knowledge of respondents re the NHI				
	Good knowledge, n (%)	Satisfactory knowledge, n (%)	No/poor knowledge, n (%)	n	
Gender					
Males	15 (27)	37 (66)	4 (7)	56	
Females	2 (14)	11 (79)	1 (7)	14	
Age					
30-40	3 (20)	10 (67)	2 (13)	15	
41–50	5 (26)	14 (74)	0 (0)	19	
51–60	4 (20)	14 (70)	2 (10)	20	
61–70	4 (33.3)	7 (58.3)	1 (8.4)	12	
Practice					
General practitioners	9 (24.3)	26 (70.3)	2 (5.4)	37	
Specialists	8 (24)	22 (67)	3 (9)	33	

All doctors were given two weeks to complete the questionnaires after which they were telephoned to check if the questionnaires were ready to be collected. Those doctors who indicated that the questionnaires were not completed were given a few more days to complete, and were then contacted again for collection.

After the collection of the questionnaires, the information was captured on computer and analysed using the Statistical Package for the Social Sciences (SPSS) version 15.0 (SPSS Inc., Chicago, IL, USA). Frequency tables were generated and responses graphed against the independent variables: gender, age, type of practice, specialisation, and knowledge, attitudes and perceptions to the proposed NHI. A level of p < 0.05 was regarded as statistically significant.

Ethics approval

Ethics approval was obtained from the University of KwaZulu-Natal Research Ethics Committee (ethics clearance number: HSS/0945/2010: Faculty of Health Sciences).

Results

A response rate of 70% (n = 70) was obtained.

Demographic of participants

Some 80% of the respondents were males with over 55% of participants in the age group 41–60 years of age, 21.4% were greater than 60 years whilst only 4.3% (3 doctors) were over 70 years old. Sixteen doctors were under 40 years old.

More than half of the doctors (53%) were general practitioners.

Below is a breakdown of knowledge of NHI by private sector doctors (n = 70) (p < 0.05):

68.6% felt that they had a satisfactory level of knowledge; 24 (3%) had good knowledge;

7.1% had no knowledge concerning the NHI.

A breakdown according to the demographics yielded the results shown in Table 1.

Means of obtaining information on NHI

Doctors who had satisfactory knowledge indicated that they would like to be informed about the NHI via:

- (1) Circulars
- (2) Newspapers
- (3) Television
- (4) Billboards
- (5) Workshops

Circulars were the most popular and workshops the least popular.

As regards awareness of doctors concerning the proposed National Health Insurance system (n = 70) (p < 0.05):

- 91% of all the doctors were aware of the proposed National Health Insurance;
- 9% were not aware of the NHI.

A breakdown according to the demographics yielded the results given in Table 2.

There was a good overall awareness in all the groups; however, the doctors in the under 40 years category displayed the highest awareness (100%).

Table 2: Respondents' awareness of the National Health Insurance scheme according to gender, age and practice (n = 70)

Demographic	Awareness of doctors re the NHI, n (%)
Gender	
Males (n = 56)	51 (91)
Females $(n = 14)$	13 (93)
Age	
< 40 (n = 16)	16 (100)
41–50 (<i>n</i> = 19)	18 (95)
51–60 (<i>n</i> = 20)	18 (90)
61–70 (<i>n</i> = 12)	11 (92)
> 70 (n = 3)	1 (33)
Practice	
General practitioners ($n = 37$)	33 (89)
Specialists (n = 33)	31 (94)

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Private sector doctors' support of the NHI yielded the following results (Table 3):

- 50% of the doctors supported the implementation of the NHI (p < 0.05);
- the male doctors were more supportive of the NHI than the female doctors;
- the older doctors had greater support for the NHI as compared with the younger doctors, while both general practitioners and specialists equally supported the NHI.

Further analysis of the results according to knowledge and awareness versus support can be seen in Tables 4 and 5.

An interesting result obtained was that, of the 13 doctors who stated they had insufficient knowledge to comment on their support of the NHI, 9 had satisfactory knowledge, 4 had no knowledge, but none had good knowledge of the NHI

Readiness of private sector doctors to implement the NHI

Table 6 indicates that more of the doctors (64%) were confident that they had the skills rather than the infrastructure, resources and time to participate in the NHI programme.

Discussion

This study analysed a sample of 100 private sector doctors to determine their knowledge, awareness and readiness for the implementation of the proposed National Health Insurance system. This was done by investigating three areas:

- (1) demographic and practice profile of the doctors;
- (2) knowledge, awareness and support of the NHI;
- (3) readiness for the implementation of the NHI.

Demographic and practice profile

The study population represented a cross-section of ages, with similar numbers of general practitioners and specialists, but only one-fifth of the participants being females.

Table 3: Respondents' support for the NHI according to gender, age and practice (n = 70)

Demographics	Support, n (%)	Did not support, n (%)	Insufficient knowledge, hence did not comment on support, n (%)
Gender			
Males (n = 56)	33 (59)	14 (25)	9 (16)
Females $(n = 14)$	2 (14)	8 (57)	4 (29)
Total (n = 70)	35 (50)	22 (31)	13 (19)
Age			
30–40 (<i>n</i> = 15)	5 (33)	7 (47)	3 (20)
41–50 (<i>n</i> = 19)	9 (47)	7 (37)	3 (16)
51–60 (<i>n</i> = 20)	11 (55)	5 (25)	4 (20)
61–70 (<i>n</i> = 12)	9 (75)	2 (17)	1 (8)
Practice			
General practitioners ($n = 37$)	19 (51)	10 (27)	8 (22)
Specialists (n = 33)	16 (49)	12 (36)	5 (15)

Table 4: Knowledge of doctors and their support (n = 70; p < 0.05)

Support for NHI	Good knowledge, n (%)	Satisfactory knowledge, n (%)	No knowledge, n (%)
Yes (n = 35)	10 (29)	25 (71)	0 (0)
No (n = 22)	7 (32)	14 (64)	1 (4)
Cannot comment ($n = 13$)	0 (0)	9 (69)	4 (31)

Table 5: Doctors' awareness of NHI and their support

	Aware of NHI, n (%)	Not aware of NHI, n (%)
Support of NHI		
Yes (n = 35)	34 (97)	1 (3)
No (<i>n</i> = 22)	21 (95)	1 (5)
Insufficient knowledge (n = 13)	9 (69)	4 (31)

Table 6: Readiness of private sector doctors for the implementation of NHI with regard to infrastructure, resources, time and skills (n = 70)

Factor	Yes, n (%)	No, n (%)	Not sure, n (%)	<i>p</i> -value
Infrastructure	32 (46)	30 (43)	8 (11)	0.001
Resources	32 (46)	26 (37)	12 (17)	0.011
Time	31 (44)	27 (39)	12 (17)	0.014
Skills	45 (64)	17 (24)	8 (12)	0.000

Knowledge, awareness and support

Only 7.1% of the respondents had no knowledge of the NHI with over 92% having either good or satisfactory knowledge. Knowledge of the National Health Insurance Scheme plays a major role in the decision-making process, as was found in a study conducted in Nigeria⁷ where it was established that respondents who did not have adequate knowledge were not willing to participate in the proposed NHI.7 This study clearly showed that those with good or satisfactory knowledge were able to indicate whether they supported the NHI or not whilst those with poor or no knowledge were not prepared to comment. On further analysis the respondents who had good knowledge, 29% of them, supported the NHI and 71% who had satisfactory knowledge supported the NHI, whilst those doctors who had no knowledge did not support the NHI at all (p < 0.005). This means that without adequate knowledge of the scheme doctors will not support it and, thus, the NHI implementation will not be successful in the country, as was confirmed in the Nigerian study where no knowledge on the part of respondents had resulted in doctors not participating in the scheme.⁷ In another South African study done with health care workers it was found that only 54.58% of the healthcare workers were knowledgeable regarding the NHI.8

Another finding in this study which is consistent with the one done in Nigeria⁷ is that those with satisfactory knowledge wanted to be enlightened further about the NHI, though their chosen methods differed. In this study the respondents stated that they would like to be educated about the NHI amongst other methods via circulars and newspapers, with workshops being the least popular means. However, in the Nigerian study⁷ the respondents wished to be educated via seminars held at hospitals. It is therefore imperative that the government makes a concerted effort to increase the knowledge of private sector doctors regarding the NHI and the policies and procedures surrounding it since a knowledgeable doctor would result in improved participation and success of the scheme. In addition a significant finding in this study was that those respondents without knowledge of the NHI did not support the implementation at all. Hence for the NHI to be executed effectively and to be sustainable in South Africa one of the initiatives that have to be taken is to improve the knowledge of private sector doctors.

However, in this study the majority of the respondents were aware of the proposed NHI; a possible reason could be that the government ruling party widely advocated a concept of universal health insurance in its election manifesto, thus creating a lot of awareness regarding the NHI.

These findings were similar to those of the Nigerian study,⁷ where the majority of radiographers surveyed were aware of the NHI system in Nigeria via seminars held in the hospitals.⁷

The finding of younger doctors being more aware is consistent with another study done in Canada, which showed that younger physicians were more aware of new health-related concepts⁹ than doctors who had qualified earlier.

In terms of whether the respondents supported the NHI, the finding of 50% showing support for the implementation is consistent with a study done in the USA¹⁰ where 62% of physicians supported a universal health programme to be instated in the country and another South African study where 55% of the healthcare workers supported the implementation of the NHI.⁸ Since both South Africa and the United States have a public sector

that provides health care to the majority of citizens and a private sector that is funded by of out-of-pocket payments and various medical aid companies,10 it is interesting to note that both countries' private sector has a similar level of support amongst the private doctors for a transformation in health care to a National Health Insurance Scheme. It can be seen that half the study population are not happy with the current health care system and would like a change. Another finding in this study was that a greater percentage of the older doctors more readily supported the NHI as opposed to the younger doctors. This could be due to the fact that older doctors are aware of the dilemmas facing their patients, since private patients utilising medical aid have the problem that when healthcare benefits are exhausted mid-year, patients are unable to receive the treatment they require. This results in patients having to seek health care in the sub-optimal public sector¹ and also those private patients who have to make exorbitant payments for medical procedures being out of pocket when they can scarcely afford it.1 These conditions could have led older doctors not to have faith in the current healthcare system and would support a process whereby healthcare is made universal and free to the public at the point of use. A further point to be noted is that 97% of doctors who were aware of the NHI supported it whilst only 3% did not support it. Therefore an awareness campaign needs to be created in order for the private sector to embrace the concept of the NHI and also to participate in it, thus ensuring that the population of South Africa obtains equitable health care of high quality under the NHI.

Readiness for the NHI

A significant finding was that less than 50% of doctors stated that they were ready for the NHI in terms of infrastructure, time and resources. These are important factors as doctors may be willing to participate in the NHI but these factors pose a barrier. However, with regard to their level of skills, almost two-thirds of doctors stated that they have the necessary skills to implement the NHI.

This is an integral point since doctors in South Africa are ready to implement the NHI but the government needs to intervene and create ways to improve infrastructure and resources in order to ensure successful implementation of the NHI scheme. Since doctors have the relevant skills to implement the NHI, it would be in the government's best interest to improve the standards for them to practise effectively and efficiently in safe environments.

In this study 44% of all doctors said they had time to treat patients in the proposed NHI system, which differed greatly from a study conducted in the Western Cape where it was stated that 73% of GPs had the capacity to treat patients in the NHI system. This huge difference could be due to the fact that in this study both GPs and specialists were included in the study, whilst in the other study only GPs were included.¹¹ When the data from this study were analysed with only the GPs, there was an increase in the percentage; namely it was noted that 54% of GPs had time to treat patients in the NHI. Another study that was done with private sector doctors in the eThekwini Metro of KZN showed that these doctors were willing to manage HIV/AIDS public healthcare sector patients.¹²

Limitations

The results may not be applicable to all private sector doctors in South Africa, since the sample size was relatively small and confined to the coastal region of the South KwaZulu-Natal province. In addition, this was a self-reported study, so the reliability of self-reporting is difficult to substantiate as

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information was collected and analysed based on what the doctors reported.

Finally, as a cross-sectional study, the direction of the association may not be causal.

Conclusion

In this study, the majority of doctors indicated that they did not have good knowledge concerning the NHI, but their knowledge was satisfactory. However, the majority displayed widespread awareness of the NHI and responded positively regarding their readiness for the implementation of the NHI, with regard to their level of skills, but with regard to infrastructure, resources and time the majority of the respondents were not fully equipped for its facilitation.

Recommendations

The government should embark on a nationwide campaign to increase knowledge of doctors regarding the NHI; this could be done via circulars, newspapers and seminars. The government needs to consult widely with stakeholders and improve the infrastructure and resources of private sector doctors to ensure their readiness for the NHI.

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