

Knowledge and Communication of the National Core Standards Tool

Winnie T. Maphumulo

<https://orcid.org/0000-0003-4727-1943>
University of KwaZulu-Natal, South Africa
thembimap@gmail.com

Busisiwe Bhengu

<https://orcid.org/0000-0002-4018-126X>
University of KwaZulu-Natal, South Africa

Abstract

The National Department of Health in South Africa has introduced the National Core Standards (NCS) tool to improve the quality of healthcare delivery in all public healthcare institutions. Knowledge of the NCS tool is essential among healthcare providers. This study investigated the level of knowledge on NCS and how the NCS tool was communicated among professional nurses. This was a cross-sectional survey study. Purposive sampling technique was used to select hospitals that only offered tertiary services in KwaZulu-Natal. Six strata of departments were selected using simple stratified sampling. The population of professional nurses in the selected hospitals was 3 050. Systematic random sampling was used to recruit 543 participants. The collected data were analysed using SPSS version 25. The study showed that only 16 (3.7%) respondents had knowledge about NCS, using McDonald's standard of learning outcome measured criteria regarding the NCS tool. The Pearson correlation coefficient between the communication and knowledge was $r = 0.055$. The results revealed that although the communication scores for the respondents were high their knowledge scores remained low. This study concluded that there is a lack of knowledge regarding the NCS tool and therefore healthcare institutions need to commit themselves to the training of professional nurses regarding the NCS tool. The findings suggest that healthcare institutions implement the allocation of incentives for nurses that attend the workshops for NCS.

Keywords: National Core Standards knowledge; communication; quality care delivery

Introduction

The healthcare sector is complex and relies comprehensively on knowledge of several partners working together and exchanging their knowledge in order to provide quality of care (Pomey et al. 2015, 2). While healthcare professionals including nurses need to acquire scientific knowledge in different fields, they also need specific knowledge related to their fields such as quality improvement and measurement tools used in the delivery of quality care (Batalden and Davidoff 2007, 2–3).

Proper management and utilisation of knowledge are a key resource for the subsistence and prosperity of an organisation (Kamhawi 2012, 810). It requires close involvement and co-operation, since it is the result of hands-on learning, observation, dialogue and interactive problem-solving (Du Plessis 2008, 285). A hurdle that limits knowledge-sharing practices is the lack of managerial and leadership direction in terms of clear communication (Du Plessis 2008, 286). Managers ought to create an environment in which people both want to share what they know and make use of what others know (Du Plessis 2008, 286).



In South Africa, to ensure that the constitutional obligation to deliver quality care to all South Africans is fulfilled, Section 47 of the Health Act, 2003 (Act No. 61 of 2003) allows the Minister of Health to prescribe quality standards for the country (Lourens 2012, 3). The National Department of Health has indicated a firm obligation to improving the quality of healthcare delivery in public healthcare settings (Whittaker et al. 2011, 60). This commitment was evident in the development of many quality improvement interventions, including the development of the National Core Standards (NCS) tool in 2008, which was revised in 2010 (Whittaker et al. 2011, 60).

The NCS tool aims at progressively raising standards of service delivery by monitoring and evaluating the quality care delivery. The NCS tool serves as a guide for managers at all levels to ensure decent and safe care to consumers of public establishments (DOH 2011, 7).

These standards are named “core standards” because they focus on crucial issues that are vital to providing quality care (DOH 2011, 7). In order to attend to life-threatening issues in quality delivery and patient safety, the NCS were structured into seven domains. According to the World Health Organization (2006, 6), a domain is that part of service delivery where safety or quality can be jeopardised. The NCS are structured in seven domains which reflect the most cross-cutting areas of high risk (DOH 2011, 6). Knowledge of these domains is crucial to all healthcare workers especially the professional nurses because they are the leaders in monitoring and adjusting delivery of quality care to the patients. Table 1 presents the seven domains of the NCS (DOH 2011, 6).

The article aimed at determining the knowledge of professional nurses regarding the NCS tool and the methods or strategies used to communicate the NCS tool and its policies and guidelines to professional nurses. This paper reports on part 1 of the study called “Analysing the process of implementation of national core standards, as a tool for ensuring quality care delivery in public tertiary hospitals in KwaZulu-Natal province”.

Table 1: Seven domains of the NCS tool

<i>Domain</i>	
Patient rights	This domain outlines what a healthcare service must do to ensure that patients' rights are respected and upheld in accordance with Batho Pele principles and the Patient Rights Charter. This also includes the right of access to needed care in an acceptable manner, seen from patients' view (DOH 2011, 17)
Patient safety, clinical governance and clinical care	This domain stresses the need for clinical governance to ensure quality care and ethical practice. It aims to mitigate adverse events, including healthcare associated infections; and supports any affected patients or staff (DOH 2011, 22)
Clinical support services	This domain covers specific systems and services essential to develop, monitor and maintain efficient patient care. It includes timeous availability of medicines and provision of effective diagnostic and therapeutic medical equipment (DOH 2011, 26)
Public health	This domain explains how integrated, quality care is provided for the whole community. Health facilities co-operate with NGOs, local communities and other healthcare providers in relevant sectors to promote health, to prevent illness, to reduce further complications and to prepare for disaster management (DOH 2011, 30)
Leadership and governance	This domain covers the strategic functions of communication, public relations, oversight, accountability, risk management, quality management and leadership. It encompasses proactive leadership offered by senior management through effective planning and risk management (DOH 2011, 34)
Operational management	This domain covers the day-to-day responsibilities involved in supporting and ensuring delivery of safe, effective patient care, including management of human resources, finances, assets and consumables, and information and records (DOH 2011, 38)
Facilities and infrastructure	This domain covers the requirements for clean, safe and secure physical infrastructure, such as buildings and equipment, and also stresses the need for effective waste management, and the availability of linen and laundry services (DOH 2011, 43)

Problem Statement

Although the NCS tool has been used for more than seven years in public healthcare institutions, millions of people still suffer the preventable harm in South Africa every day. Medical litigations have dramatically increased, not only in numbers but also in the size of the damages (Malherbe 2012, 83). This highlights a need to determine whether the NCS are known and have been communicated well to the professional nurses who should apply them in their daily management of patients in healthcare settings.

Research Methodology

Study Design

A cross-sectional descriptive study was carried out from 15 January 2017 to 30 May 2017 among professional nurses in selected hospitals. The researcher made appointments with nurse managers and assistant nurse managers for each of the four hospitals selected to explain the nature and purpose of the study. Delays were experienced while trying to get appointments with management, and further delays occurred in some hospitals to get suitable dates for data collection. Data were collected at intermittent intervals which were determined by allocated or suitable dates for each department in the different hospitals. The purpose of this article was to determine the knowledge of professional nurses regarding the NCS tool,

and the methods or strategies used to communicate the NCS tool and its policies and guidelines to professional nurses.

Research Site

This study was conducted in four hospitals that offer tertiary services in KwaZulu-Natal, South Africa. Two tertiary hospitals (A and B) situated in the eThekweni district provide both secondary and tertiary services. The third tertiary hospital (C) is located in Pietermaritzburg in the Msunduzi district serving the western half of KwaZulu-Natal, which includes the following districts: uMgungundlovu, uThukela, uMzinyathi, Amajuba and Harry Gwala. The fourth hospital (D) is situated in Empangeni in the uMkhanyakude district, serving the uThungulu, uMkhanyakude and Zululand health districts.

Study Population

The target population for the study included all professional nurses in full-time employment in four selected hospitals. There were 3 050 professional nurses in these hospitals. Table 2 shows the distribution of the professional nurses in each hospital.

Table 2: Statistical distribution of population

<i>Hospitals</i>	<i>Professional nurses</i>
A	1 069
B	631
C	494
D	868
Total	3 050

Eligibility Criteria

Inclusion Criteria: All professional nurses who were permanently employed in the selected hospitals, willing to participate and available during the study period were included in the study. Day and night nurses were included.

Exclusion Criteria: Professional nurses who were off duty and those who were on leave (vacation, maternity, sick or study leave) during the data collection were excluded from the study. The nursing managers and chief nursing managers were excluded from the study.

Sample and Sampling Techniques

Purposive sampling was used to select the four hospitals offering tertiary services in the province. These were further stratified into six strata, namely stratum 1: medical, stratum 2: surgical, stratum 3: critical-care unit, stratum 4: high care, stratum 5: paediatrics, and stratum 6: obstetrics, using simple stratified sampling. In each stratum, every second ward was selected from the list of wards provided by the nurse manager, using systematic random sampling. Convenience sampling was used to select professional nurses on both day and night duty in the selected hospitals. A total sample size of 437 respondents was used. The respondents were in stratum 1: medical = 125, stratum 2: surgical = 95, stratum 3: critical care unit = 127, stratum 4: high care = 17, stratum 5: paediatrics = 60, and stratum 6: obstetrics = 13.

Sample Size

A sample size of 543 was required to estimate the proportion of professional nurses who knew the NCS tool, within ± 6 per cent with a probability of 95 per cent, and assuming 50 per cent were knowledgeable. The sample size was calculated using Stata 13 statistical software.

Instrument for Data Collection

A structured questionnaire was used for collecting data. This questionnaire was designed based on the specific items of the NCS tool, which were modified to suit the purpose of the study. Section A of the questionnaire contained 8 items on the socio-demographic characteristics of respondents, section B contained 10 items on the knowledge of professional nurses about NCS and section C contained 8 items on how the NCS tool was communicated to the professional nurses.

Data Collection Technique

Although the time taken to complete each questionnaire was approximately 20 minutes, the researcher had to personally obtain consent, hand out questionnaires, explain them and collect the data. This had to be done whenever the nurses had time available, for example during tea or lunch breaks or on the rare occasion during a ward meeting arranged by management for day and night nurses. After every meeting, each respondent put his/her own completed questionnaire in the enclosed box provided and located in the duty room. Time was allowed for participants to complete the questionnaire at their leisure for those willing to do so. For the latter participants, the questionnaires in the box were collected by the researcher approximately one week after the initial meeting.

Scientific Rigour

The questionnaire was tested and validated to ensure understanding and meaning of presented concepts, and simplicity of statements, and also to determine the time for the completion of the questionnaire during the pilot testing. The respondents used in the pilot study were marked by using wards not used in the main study to enable them to be excluded from the main population. Readability and comprehension were verified by the supervisor who had a research background and two quality managers from two participating hospitals in the eThekweni district. A content validity was also done whereby the items of the research instrument were compared with the objectives of the study to ensure that the tool was measuring what it purported to measure. The degree to which each item in a scale correlated with each other was validated using Cronbach's alpha coefficient. The questionnaire had a good internal consistency, with a Cronbach's alpha coefficient of .851. Pilot data did not lead to the modification of materials or procedures.

Ethical Considerations

Ethical approval was obtained from the Humanities Research Ethics Committee of the University of KwaZulu-Natal (HSS/1905/016). Permission from the gatekeepers was obtained from the KwaZulu-Natal Department of Health and managers of institutions and departments or units or wards. Written consent was obtained from the participants after explaining the research study including potential risks and mitigation of their rights. Risks mean disruption of ward activities and relaxation time. These were mitigated by distributing the questionnaires during tea or lunch breaks. Respondents that required longer time to fill the questionnaires at their own time were allowed to do so. They were requested to return the questionnaires in a week's time and put them in a sealed box provided in the unit. Participation in the study was voluntary. Confidentiality and anonymity of the respondents were maintained throughout the study by using assigned codes and numbers to each questionnaire so that it was not possible to link the questionnaires to individual respondents.

Data Analysis

Data were analysed using the Statistical Package for the Social Sciences (SPSS), version 25. Descriptive statistics were used. Knowledge was scored with 1 for a correct answer and 0 for an incorrect answer. The total score was then calculated. McDonald's standard of learning outcome measured criteria was used to categorise professional nurses' knowledge regarding the NCS tool (McDonald 2002). This criterion was developed to measure the actual performance of students' learning in educational establishments (McDonald 2002, 183). The criteria were categorised into five groups as shown in Table 3.

Table 3: Categories of professional nurses' knowledge

<i>Level of knowledge</i>	<i>Composite percentage of scores (%)</i>
Very high	90 to 100
High	80 to 89.99
Moderate	70 to 79.99
Low	60 to 69.99
Very low	< 60

On the basis of McDonald's score, high (80 to 89.99%) and very high (90 to 100%) scores on knowledge were taken as a pass, while moderate (70 to 79.99%), low (60 to 69.99%) and very low (< 60%) were taken as a fail. The researcher used the McDonald grading score to determine pass and fail scores because the Office of Health Standards Compliance has set the average compliance score for facilities to be 80 per cent and above, meaning that any facility that gets an overall total score below 80 per cent is considered non-compliant with NCS. The relationship between the knowledge scores and demographic data variables was calculated using Pearson's chi-squared (χ^2) test. Statistical association was tested using 95 per cent confidence interval (CI) and p-value < 0.05.

The Likert scale was used to determine strategies used to communicate the NCS tool to professional nurses. The Likert scale data were coded as 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The Likert scale data were recoded to agree (strongly agree and agree), disagree (disagree and strongly disagree) and neutral (neutral and missed). The Pearson correlation was done to determine the association between knowledge and communication. A binary logistic regression model was used to predict the outcome (i.e. a pass or a fail) for knowledge based on demographic characteristics of the respondents.

Results

Although the calculated sample size was 543, only 500 professional nurses were available and willing to participate in the study; hence 500 questionnaires were distributed. Thereafter, about 466 questionnaires were returned giving a response rate of 87.4 per cent. After discarding 29 questionnaires for non-adherence to instructions, the final analysis included 437 questionnaires.

Socio-demographic Characteristics of the Respondents

This study included only professional nurses that were in full-time employment, and 437 nurses answered the questionnaire. Respondents in participating hospitals were Hospital A = 147/437 (33.6%), Hospital B = 82/437 (18.8%), Hospital C = 108/437 (24.7%), and Hospital D = 100/437 (22.9%). The majority of the respondents (351/437, 80.3%) were female and only 36/437 (8.2%) of the respondents were below 25 years of age. The highest number of respondents (127, 29.1%) were working in critical-care units, most of the respondents (51, 80.3%) were working on day duty and only 86 (19.7%) were working night duty. The majority of the respondents (224, 51.3%) had a Basic Diploma in nursing and 115 (26.3%) had a Diploma in specialist qualifications. The results also showed that 51 (11.7%) respondents had less than a

year's working experience, while the rest of the respondents (386, 88.3%) had working experience ranging from 6 to more than 20 years. See Table 4.

Table 4: Socio-demographic characteristics of respondents

<i>Characteristic</i>	<i>N</i>	<i>%</i>
Gender		
Female	351	80.3
Male	85	19.5
Other	1	0.22
Marital status		
Single – never married	151	34.6
Married	196	44.6
Living with partner	41	9.4
Divorced	26	5.9
Widowed	23	5.3
Age		
< 25	36	8.2
26–29	48	11.0
30–39	153	35.0
40–49	124	28.4
40–49	68	15.6
> 60	8	1.8
Unit where you currently work		
Medical	123	28.1
Surgical	99	22.7
Critical care	127	29.7
High care	16	3.7
Paediatrics	59	13.5
Obstetrics	13	3.0
Shift you are working		
Day	351	80.3
Night	86	19.7
Years of experience after basic training		
< 1	51	11.7
2–5	79	18.1
6–10	131	30.0
11–15	92	21.1
16–20	44	10.1
> 20	40	9.2
Your highest academic qualification		
Diploma: Basic programme	224	51.3
Degree: Basic programme	54	12.4
Short course: Specialist programme	18	4.1
Diploma: Specialist qualification	115	26.3
Post Basic B degree(specialist)	22	5.0
Master's Degree	4	9.0

Knowledge of Respondents on National Core Standards

Out of 437 respondents, 393 (89.9%) knew that the purpose of NCS is to develop a common definition of quality. Of 437 respondents, 243 (55.6%) knew that vital measures mean those measures that ensure that the safety of patients and staff is safeguarded and to prevent harm or death. The respondents were asked to

describe the meaning of extreme measure as described in the NCS tool, and only 251 (57.4%) knew that extreme measure meant that risk was most likely to occur. However, serious deficits were identified in their knowledge level when asked about the scoring of the NCS tool. Most respondents had no idea about the score that the facility should have to be compliant with extreme measures. Only 69 (15.8%) knew that the facility needs to score 100 per cent to be compliant with extreme measures because if not, it can result in grievous consequences. Furthermore, the respondents were also asked the overall score that can make a facility to be non-compliant with vital measures, again only 120 (27.5%) respondents knew that the overall score below 80 per cent will cause the facility to be non-compliant with vital measures.

The respondents were asked to choose the correct response relevant to the public health domains as described by the NCS tool and only 89 (20.4%) respondents knew that the emergency plans exist to protect public safety if there are significant disease outbreaks. The respondents were asked to choose the statement that did not belong to the patients' rights domain, and a significant number of respondents, 238 (54.5%), knew that it was the one that said clinical risk identification and analysis take place in every ward to prevent patient safety incidents.

Half of the respondents (253, 57.9%) knew that the statement talking about management of waiting times and queues to improve patient satisfaction did not belong to the patients' safety domain. Out of 437 respondents, 177 (40.5%) knew that health promotion and the prevention of disease statement did not belong to clinical support services as described in the NCS. The respondents were asked to choose the statement that did not belong to the operational domain, and more than half of the respondents (316, 72.3%) knew that it was the statement talking about the buildings in this domain. The average knowledge score was 5.67 ± 2.293 . See Figure 1.

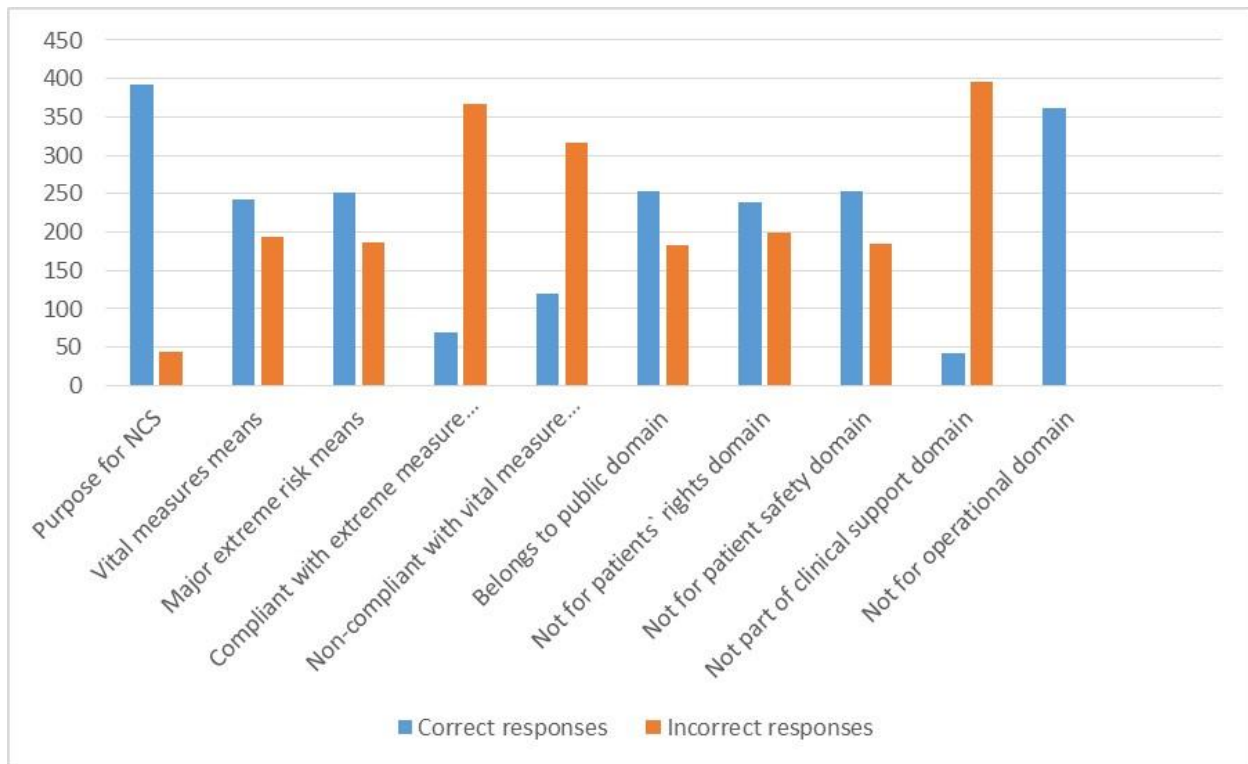


Figure 1: Distribution of the correct and incorrect responses about the NCS

Communication of the National Core Standards Polices and Guidelines

According to the respondents' opinions, the NCS policies and guidelines were communicated in simple terms that were well understood by the nurses (267, 61%). To determine the clarity of the NCS tool and methods often used to communicate the NCS, the following strategies were used: meetings 251 (57.4%), emails 210 (48%), information documents 250 (57.2%) and in-service education 250 (57.2%).

Only 147 (33.6%) of the respondents agreed that they were involved by the department in the development of the NCS through consultative workshops, while 128 (29.2%) agreed that they participated in the development of NCS tool by the Department of Health through the Delphi technique. The Delphi technique is an interactive process (three or four rounds) between the experts in quality and the intended users of the NCS tool to view its face validity (Hasson, Keeney, and McKenna 2000, 1008).

Slightly less than half of the respondents (211, 48.2%) felt that they were involved only in the implementation of the NCS tool, and only 191 (43.7%) respondents indicated that they were involved as nurses in the development of the vision and objectives of their departments. The average communication score of the respondents was 24.64 ± 7.022 . See Table 5.

Table 5: Communication of the NCS tool – Standards and polices

<i>Communication of the NCS</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Total</i>
The policies and guidelines are expressed in simple terms that are well understood by nurses	267(61%)	37(8.5)	133(30.4)	437(100%)
NCS policies and guidelines are communicated in your department via meetings	251(57.4%)	55(12.6%)	131(29.9%)	437(100%)
NCS policies and guidelines are communicated in your department via information documents	250(57.2%)	48(11%)	139(31.8%)	437(100%)
NCS policies and guidelines are communicated in your department via in-service training	250(57.2%)	56(12.8%)	131(29.9%)	437(100%)
I was involved only in the implementation of the NCS	211(48.2%)	70(16%)	156(35.6%)	437(100%)
NCS policies and guidelines are communicated in your department via emails	210(48.0%)	57(13%)	170(38.9%)	437(100%)
As a nurse, I was involved in the development of the vision and objectives of my organisation in line with the NCS tool	191(43.7%)	54(12.4%)	192(43.9%)	437(100%)
I participated in the development of the NCS tool by the Department of Health through consultative workshops	147(33.6%)	59(13.5%)	231(52.9%)	437(100%)

Association of Variables

This study showed no significant associations between the respondents' knowledge scores (according to McDonald's grouping) and hospitals where the respondents were working ($\chi^2 = 0.155$, $p = 0.125$). In addition, gender did not seem to be associated with the knowledge scores (pass or fail scores) ($\chi^2 = 0.981$,

p = 0.964). Again, there was no significant association between the marital status of the respondents and the overall pass or fail using McDonald's scale ($\chi^2 = 0.412$, p = 0.217).

The results revealed that the units where the respondents worked were positively associated with the knowledge of vital measures as explained in the NCS ($\chi^2 = 0.004$, p = 0.206). The overall knowledge score was found to be associated with the shift the respondents were working ($\chi^2 = 0.015$, p = 0.003). The Pearson correlation coefficient between the communication and knowledge was $r = 0.055$. A binary logistic regression model was used to predict the outcome (i.e. a pass or a fail) for knowledge based on the demographic characteristics of the respondents. Age and shift were found to be significant predictors of outcome, i.e. p = 0.004 and p = 0.042 respectively. The unit where the respondents work was found to be significantly associated with the outcome but on logic regression this variable was not a good predictor of outcome.

Discussion

In this study, the researcher aimed to determine the level of professional nurses' knowledge regarding the NCS tool and to determine the association between the methods of communication of the NCS and the level of professional nurses' knowledge. The results indicated that most of the respondents were female (351, 80.3%), which concur with other studies that reveal that nursing is still predominantly a female profession (Ekore 2011, 2; Özdemir, Akansel, and Tunk 2008, 159). Few male nurses were entering the nursing profession owing to the many obstacles men encounter which limit their choices of specialty, for example obstetrics (Kouta and Kaite 2011, 59). The study revealed that 36 (8.2%) of the respondents were less than 25 years old. The results suggested that there were few young nurses in the profession. The reason was found to be the fact that most young professionals, after completion of their training and community service, choose to work either overseas or in the private sector for a better income or owing to job dissatisfaction (Suadicani et al. 2013, 98). Severe shortage of nurses in South Africa was also owing to the rationalisation of nurse training by the government in 1994, which affected the recruitment processes of young nurses (Cronning 2013, 499).

The overall knowledge score of the NCS was found to be associated with the shift that the respondents were working, chi-square .015 and p-value of .003. According to a study by Eslamian, Moeini, and Soleimani (2015, 379), most participants stated that the challenge to continual education is caused by tiredness because they were expected to attend workshops while they were coming from night duty. The authors therefore concluded that some of the factors that contributed to the low knowledge scores were due to the shift the respondents were working, maybe some respondents on night duty did not go for training workshops as indicated by the cited authors.

The most striking finding was the low level of knowledge among professional nurses (who are the key drivers of quality care) regarding the NCS tool. Using the McDonald grading score, where a total score of 80 per cent and above was taken as a pass and the total score below 80 per cent was taken as a fail, the findings revealed that only 16 (3.7%) of the participants knew the NCS tool. This was in contrast with the study done in a Soweto clinic by Madisha (2015, 41), which found that 71 per cent of the respondents had knowledge of quality standards required to comply with the NCS. The deficiency in knowledge among the users of the NCS may contribute to poor quality care delivery in public hospitals, since the NCS tool gives guidelines and policies that, when adhered to, ensure quality care delivery. Findings also revealed that the respondents had a huge knowledge deficit on the scoring of the NCS tool (69, 15.8%), even those that received a pass score. The lack of knowledge and skills among healthcare workers is one of many barriers to improving quality of care in the institutions (Batalden and Davidoff 2007, 3).

The findings showed that different methods were used to communicate the NCS tool: meetings, emails, information documents and in-service education. Results revealed that there was no formal structure used to communicate the NCS tool. Sherman et al. (2015, 9) believed that the lack of a formal structure for reporting mechanisms can lead to either a loss of essential knowledge or information overload if people are trying to report every detail.

The Pearson correlation coefficient between communication and knowledge was $r = 0.055$. The results revealed that although the communication scores were high, the knowledge scores were not increased. This could mean that although the respondents were taught about the NCS, most of them did not understand the tool well. Therefore, the authors concluded that 421 (96.3%) respondents lacked knowledge of the NCS tool, although most of them claimed it was communicated well. This was contrary to the study done by Ibrahim et al. (2014, 4), where poor communication of TB control measurements was associated with the lack of knowledge in patients with poor adherence to TB control measures.

Conclusion

Nurses' knowledge on the NCS tool remains low, seven years after its introduction despite the use of various methods of communication of the NCS tool such as meetings, consultative workshops, the Delphi technique, in-service training and emails. However, it is important to note that, according to the respondents, none of these methods were predominantly used. The shift (day/night) that the respondents are working affects the level of knowledge regarding the NCS tool.

Recommendations

The most important drawback in the implementation of the NCS tool, as reflected in this study, is the lack of knowledge among the professional nurses. Professional nurses need to have in-depth knowledge about the NCS tool. Without an in-depth knowledge it is impossible to expect them to implement the tool effectively, which will adversely affect quality care delivery. It is important, therefore, to investigate the content of the programme or training of the NCS tool and how it is communicated among the nurses.

The study also revealed that the level of knowledge was too low among nurses that were working night duty, which could have been the cause of their not attending workshops. The healthcare managers should develop a system of awarding incentives to nurses that attend workshops or training, for example continuing professional development (CPD) points to encourage them to develop. The policies and guidelines of the NCS tool must be expressed in simple terms that are well understood by all nurses.

Limitations of the Study

Data collection was limited to professional nurses at the selected hospitals in KwaZulu-Natal. The study was confined to only one province in South Africa. Therefore, the results cannot be generalised to other provinces, private hospitals and other health institutions. The NCS tool is only used in public institutions in South Africa.

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