Perceptions of the role of the clinical nurse practitioner in the Cape Metropolitan doctor-driven community health centres

Kapp R, MBChB, MFamMed
Department of Family Medicine and Primary Care, Stellenbosch University

Mash RJ, MBChB, MRCGP, PhD
Department of Family Medicine and Primary Care,
Stellenbosch University and Metro District Health Services,
Department of Health, Western Cape.

Correspondence: Prof. Bob Mash, PO Box 19063, Stellenbosch University, Tygerberg 7505, Tel.: 021 938 9170, Fax: 021 938 9153, Email: rm@sun.ac.za

Keywords: clinical nurse practitioner, community health centre, doctor driven, role, support.

Abstract

Background: The purpose of this study was to evaluate the role of the clinical nurse practitioner (CNP) in a doctor-driven primary health care setting. A descriptive study was undertaken, using both a quantitative and a qualitative methodology. The study was undertaken in community health centres (CHC) in the Cape Metropolitan area.

Method: A situational analysis was conducted of all 41 CHCs in the Cape Metropolitan area. Three focus group interviews were then undertaken with CNPs, doctors and managers to determine the factors influencing the effective functioning of the CNP.

Results: Five-seven percent of the 88 CNPs were totally inactive with regard to consulting patients and only 28% were utilised in a full-time capacity. The major themes to emerge were the factors that determine the effective functioning of the CNP, including self-confidence gained from regular practise, support for their role from doctors and managers, role clarity, and enrolment in the course for the appropriate reason.

Conclusions: When enrolling nurses for the CNP course, preference should be given to nurses who will be able to immediately put their training into practise. The managers need to foster a strong CNP identity and ensure maximum opportunities to practise in order for nurses to attain the status of a secure CNP. The doctors need to appreciate the nurses' value in the multidisciplinary team and offer the necessary support. Furthermore, the nurses' role needs to be properly conceptualised by policy makers and contextualised at ground level for them to be effectively utilised in a doctor-driven CHC. ***(SA Fam Pract 2004;46(10): 21-25)***

Introduction

The concept of shifting responsibility for primary care, from the doctor to the clinical nurse practitioner (CNP), evolved in South Africa in the 1970s due to the shortage of doctors in many areas and the need to see large numbers of patients at the primary health care (PHC) level.[1] It was further argued that South Africa was unable to carry the economic burden of training and paying doctors, who are over-skilled and inappropriately trained to provide basic PHC and are unwilling to serve in the most needy areas.[2,3]

The first diploma course for CNPs in the District Health Services of the Cape Town Metropole (MDHS) was introduced in 1982. Although the communities served by these community health centres (CHCs) enjoyed far better access to doctors than their rural counterparts, the CHC doctors were finding it increasingly difficult to cope with the high number of patients. It was therefore argued that a CNP could see patients with minor ailments and free up the doctor to spend time on more complicated patients. According to Dr John Smith, "for a service to be cost-effective, no-one should perform a task which someone less qualified can carry out as competently".[4]

It was therefore intended that the CNP should alleviate the doctor's workload by seeing a reasonable number of patients,[4,5] attend to minor ailments so that the doctor could attend to complicated cases,[6,7,8] and utilise her nursing skills to educate patients with chronic diseases.[9,10,11,12]

In 1999, some three million patients were treated by 150 doctors and 90 CNPs in 43 CHCs in the Cape Town Metropole.[13] Having worked for eight years as a medical officer at several CHCs, I became increasingly aware of the confusion and conflict surrounding the role of the CNP. I also observed the large variation in the effectiveness of different CNPs in different settings and the various factors that impact on her performance. While this study was in progress, plans were under way for

the conversion of certain CHCs to "nurse-driven centres" as part of the implementation of a district health system – bringing the relevance of the role of the CNP into even sharper focus.[13]

The objective of this study was therefore to describe the current function of CNPs and to discuss whether their role as originally envisaged is being fulfilled. In particular, the study describes how CNPs are currently utilised and what factors determine their effective functioning.

Methods

This was a descriptive study with two distinct parts. The first part was a cross-sectional survey of how the CNP is utilised at each CHC. In August and September 1999, structured telephonic interviews were conducted with the sister-in-charge at each CHC to determine the number of CNPs employed and their utilisation. The information obtained during the interview was further validated by crosschecking with other staff at that CHC (doctor, CNPs), with data from the Provincial Administration Western Cape (PAWC) head office at Woodstock, with the relevant nursing manager of that district, with a previous situational analysis conducted by a nursing manager in 1998, and by presenting the findings to a senior management meeting.

The second part explored the factors that determine the effective functioning of the CNP.

Three focus groups were held, one with 11 CNPs, one with eight doctors and one with five managers. The selection of participants was purposive in that CNPs with a wide range of different experiences were invited from CHCs that differed in terms of their size, function (integrated with local authorities or not), location (rural or urban), population group served, number of doctors employed, and utilisation of CNPs (obtained from the first part of the study). Care was taken to invite senior sisters in order to minimise any effect of hierarchy in the group and to ensure depth of experience. For the same reason, CNPs who were currently practising were favoured so as to gain maximum insight from those actively engaged in CNP work. All the CNPs were women. Doctors were sampled in a similar way, with preference being given to doctors who were senior and who had broad experience from working at several different CHCs with different CNPs.

The initial exploratory question was: "Describe your experiences (positive and negative) in your work as a CNP / in your work with CNPs / in managing CNPs" (for CNPs, doctors and managers respectively). Sessions were audiotaped, with the assurance of confidentiality. The author was the facilitator for each session, with the research assistant making field notes. The audiotapes were transcribed and these transcripts were checked against the tapes for errors and used, together with the tapes and the field notes, as data. Data analysis was done separately for each focus group interview and independently by the author and research assistant. The analysis was conducted according to the method described by Pope et al and Pope and Mays.[14,15] After becoming familiar with the data, the researchers inductively identified the key issues, concepts and themes. Following the coding and indexing of the text, separate charts were created for each theme or sub-theme, containing distilled summaries of views and experiences, as well as verbatim text. The charts were then used to define concepts and to establish relationships between themes in an attempt to answer the research question. Three tables and one schema were constructed to visually depict this information. Following

Table I: Factors influencing the effective functioning of the CNP

Factors	Quotes
• The effective CNP is self-motivated to do clinical work	*"we had to do it"* (CNP) *"you know you want to do it"* (CNP) *"they should only volunteer to be trained if they are going to practise, not just because the matron told them to"* (doctor)
• Regular clinical practise is linked to the building of confidence	*"only if you practise are you going to get that confidence"* (CNP) *"I never practised so I was very unsure of myself"* (CNP) *"she shouldn't be required to do other nursing work, so that she can acquire maximum experience"* (doctor) *"she has developed confidence by being in the field"* (managers)
Support from doctor	
• Doctors are needed for clinical support and referral	*"you know that if you are stuck you just go to doctor"* (CNP)
• Doctors should be easily accessible	*"they need support all the time with every patient"* (doctor)
• A good relationship with the doctor is beneficial	*"they should have easy access to a doctor"* (doctor) *"I would feel insecure if there were no doctor"* (CNP) *"they* [doctors] *never make you feel small"* and *"they are always there for the sister"* (CNPs) *"you reiterate that she's done a good job in the presence of the patient"* (doctor) *"a dedicated member of the medical team…we are all working together towards looking after patients"* (doctor) *"there is a place for the CNP who is proficient and efficient and backed up by the doctor"* (managers)
Support from managers	
• CNPs have a need for continuing professional development	"*even doctors go to lectures… and we are not doctors, we are nurses … and yet we are expected to do the same work as the doctors and without in- service training"* (CNP)
• Adequate staffing prevents the CNP from being used inappropriately	"*we always stand in for everybody… they don't care because the CNP is there*" (CNP)
• CNPs have a need for financial reward and appreciation	*"we do a doctor's job, we do a pharmacist's job, we do a whatever's job…but we don't get a bonus or anything for that"* (CNP)

Table II: Factors relating to the role of the CNP

Factors	Quotes
1. Identity	
• CNPs still see themselves as nurses	*"fellow nurses"* and "*He is the doctor and I am the nurse"* (CNP) "*very few CNPs go around thinking they're a doctor"* (doctor) "*a generalist nurse who can provide holistic care"* (manager)
2. Purpose	
• To help the patient	"*We are there to educate the people"* (CNP) [Due to the CNPs' superior understanding of the communities they serve] "*some patients are getting a better deal from a CNP than from a lot of us [doctors]"* (doctors)
• To relieve the doctor's workload	"*to relieve the workload of doctors*." (CNP) "*they take a load off the doctors"* (doctor) However, she was often unable to cope with the patient load due to her "*laborious note-taking*", resulting in the "*topsy-turvy role"* of the CNP where she should be supporting the doctor, but the doctor ends up having to support her without any perceived benefit to the doctor (managers)
3. Utilisation	
• Triage ("sorting") and treating minor ailments	"*Minor ailments for nurses, major ailments for doctors, but there must be a doctor available"* (CNP) "*All primary patient contacts should be with a CNP, with access to a doctor"* and "*We are very dependent on the CNP to sort throughout the day"* versus "*triage is the worst place to utilise a CNP* [due to the potential medico-legal ramifications] (doctors) "*the CNP and doctor working together…seeing patients from the same batch of folders"* (doctors)
• Consulting patients at random	
• Chronic disease clinics ("clubs")	Although the managers emphasised her potential utilisation in chronic disease management, the CNPs were not in favour of this because "*it is too boring"*

Table III: Perceptions relating to a nurse-driven service (NDS)

Perceptions	Quotes
1. CNP	
• Concept of NDS equated with poor/absent doctor-support	*"you wait for hours before you get help* [from the doctor] *and the patient is dying"*
• Further pressure on an already overloaded CNP	"*I would like to know if I need somebody, there will be somebody for me"*
2. Doctors	
• Realisation that NDS is not the ideal situation, but an attempted solution to a shortage of doctors	*"I realise we're obviously just not coping with giving what I would be happy with as adequate health care right now"*
• Inability of the CNP to cope with extra patient load could lead to negative impact on patient care	*"patients with serious illnesses will slip through the net"*
• Potential threat posed to doctors' job security	*"the expansion of the roles of the CNP should not be at the total expense of the doctor, we must safeguard that"* and *"the role of the doctor is changing and the doctor should be part of the change"*
3. Managers	
• NDS seen as the political and national ideal	*"NDS is the general policy how Primary Health Care services should be run…it is expected of us"*
• Concern about the negative impact on the CNP	*"the nurse in the NDS has a real fear that she will become isolated and be left to do more than she is able to accomplish"*
• Concern about clarity of the CNP's role	*"she should complement, not substitute the doctor"* and *"my fear is that planning is going replacement way"*

the independent data analysis of each focus group, the researchers reached consensus through discussion.

Results

Fifty out of 88 trained CNPs employed by the PAWC (57%) were inactive with regard to consulting and treating patients; 25 out of 88 (28%) were utilised in a full-time capacity as a CNP; and 13 out of 88 (15%) were engaged in part-time CNP activities (i.e. most days, but not every day). Of the 38 "active" CNPs, 30% treated only adults, 27% treated only children and 19% were involved in the chronic diseases clinics ("clubs"). Only 19% treated both children and adults.

The results from the three focus groups were combined and are presented as three major themes. The first theme relates to the factors that influence the effective functioning of the CNP (Table I). The second theme relates specifically to the role of the CNP (Table II) and the third describes the perceptions surrounding a nurse-driven service (Table III). Verbatim quotes are represented in italics.

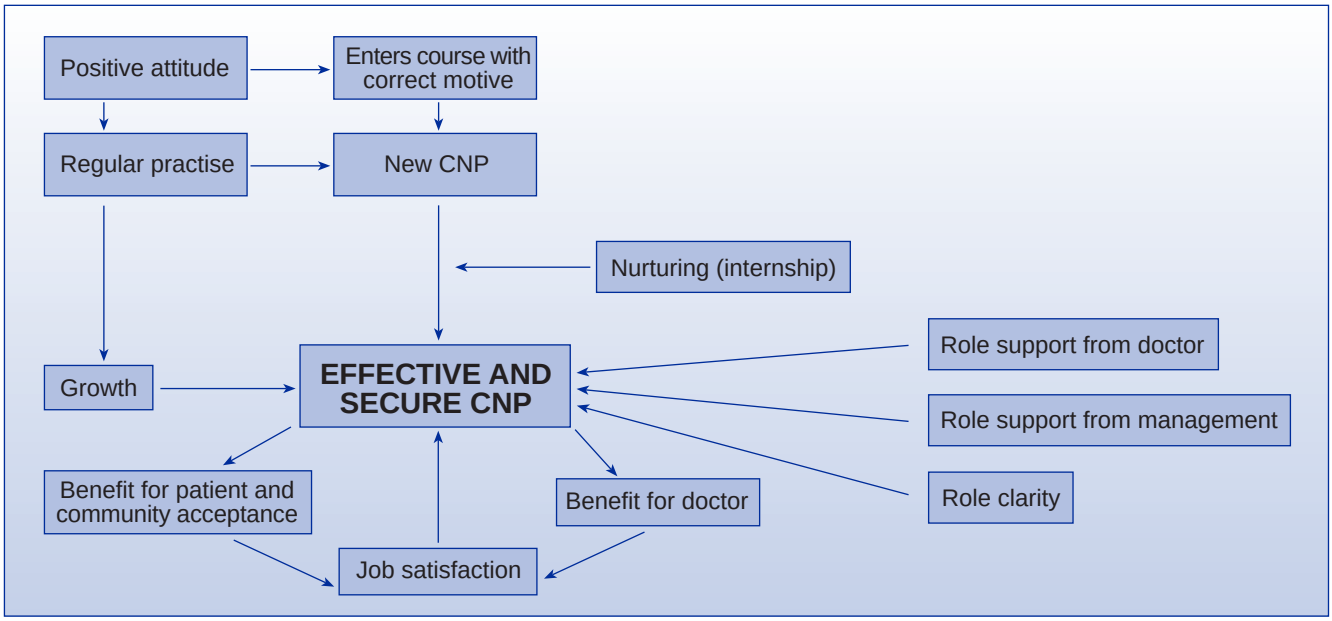
A schema was constructed to depict the interplay of the various factors that lead to the effective functioning of the CNP (Figure 1). The *effective CNP* enters the training course because she is personally motivated and wants to serve her community better. On completion of the course she has ample opportunity to practise her newly acquired skills and receives the necessary guidance and encouragement from the doctor with whom she works. As a result, she continues to be motivated and demonstrates growth in terms of her clinical capacity to deal with an increasing number of patients.

As an effective CNP, her patients can clearly see the beneficial way she impacts on their wellbeing, granting her the respect of and acceptance by the community she serves. The doctor also notices the positive impact she has on his workload and is further motivated to support her. All these factors lead to enjoyment of her work and better understanding of her role by the doctors and patients in her CHC, inspiring her to grow in her work and deliver an increasingly better service. However, she remains reliant on ongoing support from the doctors and her managers.

Discussion

The findings of this study should be considered in the light of the 2010 Health Plan of the Western Cape Province, which aims to increase community-based care for TB and psychiatric patients and ensure that 99% of chron-

Figure 1: The effective cnp



ic care consultations and 90% of acute care consultations happen within the district health system.[16] The plan implies a higher workload at primary care level and a higher percentage of that care to be delivered by CNPs. At the same time, it is likely that CNPs will be crucial in the rollout of antiretroviral medication.

The finding that 57% of CNPs were inactive and that only 28% were employed as full-time CNPs reflects a waste of human and training resources. The reasons for non-practise are multi-factorial, ranging from the poor selection of motivated candidates for training, the inability to practise clinically due to staff shortages after training, poor support, unwillingness to practise due to a lack of financial incentives, to a fear of clinical consulting because of potential medico-legal consequences.

One of the key issues to emerge is the need for the role of the CNP to be clarified and agreed upon at an organisational and policy level. If, for example, her purpose is to alleviate the doctor's workload, then she should be held accountable for seeing a certain number of patients. If her function is to see minor ailments only, as is perceived by the CNP group, then the term "minor ailments" should be defined and the process whereby such conditions are identified should be clarified. If she is to specialise in the chronic diseases "clubs", this needs to be justified in the light of recent evidence demonstrating the failure of the "club" system.[17] If her purpose is to deliver a comprehensive service to her clientele, it needs to be explained why only 19% of CNPs are treating both adults and children and why the CNP focus group felt strongly about selecting the patients they wished to consult.

Another key area is the role of the CNP versus that of the doctor in the CHC. At present, both are employed in parallel, usually seeing patients from the same pool and often working in isolation. This equity of roles appears to lead to the doctors feeling threatened by the expanding role of the CNP, and the CNP feeling unsupported by the doctors. It seems self-evident that the fully trained family physician with at least two years postgraduate vocational training should not be fulfilling the same function as a CNP. In addition, there is evidence that consulting in the primary care setting is not as straightforward as is often portrayed by the picture of minor, self-limiting complaints. The trained CNPs' approach to cough, the commonest symptom in primary care may, for example, require the development of a specific post-basic training package in order to improve the quality of care.[18] Decision making in primary care is characterised by large numbers of diverse complaints involving uncertainty, undifferentiated problems, the interplay of bio-psychosocial factors and the knowledge that serious medical conditions are hiding amidst the sea of patients. By clearly defining the respective roles of the participants in a primary care team, a more functional team could be created. It may be necessary to allow the doctor more scope to spend time mentoring and supporting the CNP. Indeed, the creation of practice teams, whereby a family physician supports a team of community service doctors, CNPs and interns may be a viable model. Good cooperation between the doctor and nurse coincides with a high quality of health service and ensures the rational use of resources in relation to the patient's needs.[8,19] The rural CNP is a "jack-of-all-trades" who must be able to function without a doctor, whereas the CNP in the MDHS works together with several doctors. This greater availability of all categories of workers in the PHC team should allow for greater specialisation by each member, and not be an intimidating factor.[20] At the CHC level, the CNP's role should be contextualised by the staff involved. This

implies that the various managers and CNPs sit and negotiate how she can be utilised most effectively in that particular CHC, using her job description as a guideline.

A further concern raised was that in a health system that has traditionally used doctors to deliver primary care at the CHC, the expanding role of the CNP may be perceived by the community as a lowering in the quality of care and this poor community acceptance may impact negatively on her effectiveness.

The professional identity of the CNP could be strengthened by providing appropriate financial incentives and a career pathway. It is no coincidence that the CNPs in the group were keen to refer to themselves as "fellow nurses" and seldom as "fellow CNPs", and bemoaned the lack of meetings where they could relate their experiences and express their concerns among their colleagues. This poor professional identity could be further strengthened by meeting regularly as a group, as described by Mazibuko in 1989.[3]

Although the findings of this study are localised to the doctor-driven CHCs in the Cape Town Metropole, many of the issues have wider application. In particular, the role of the family physician in the district and his or her relationship to the CNP is one that all districts must come to terms with. The nature of the roles, relationship and functioning of these two key primary care providers is an area that is under-researched in South Africa and that would benefit from a greater openness and dialogue between all role players.

Conclusion

The CNP will continue to play a valuable role in CHCs, but in order for her to function effectively, attention must be paid to who is sent for training, whether the trained CNP is allowed to gain immediate clinical experience and whether the CNP receives sufficient support from the doctor. In addition, the intended role of the CNP and how she relates to the doctor within a functioning primary care team need particular attention. This also implies a clarification of the role of the family physician and other doctors within the district health system.

Acknowledgements

We would like to acknowledge the assistance of Ms Louisa Williamson in collecting and analysing the qualitative data from a nursing perspective.

Conflict of interest

None declared

References

1. Schneider H, Malumane L, et al. The training of primary health care nurses. *Nursing RSA* 1989;4(11):37-8.
2. Evian C. What is our manpower policy in primary health care services? *Nursing RSA* 1989;4(11):36.
3. Mazibuko R. How do primary health care nurses cope? *Nursing RSA* 1989;4(4):6-41.
4. Smith JA. The role of the private nurse practitioner: a family practitioner's viewpoint. *Nursing RSA* 1984;1(6):33-5.
5. Sergison M, Laurant M, Sibbald B. Substitution of doctors by nurses in primary care (protocol). *The Cochrane Library,* Issue 3. Oxford: Update Software; 1999.
6. Salisbury CJ, Tettersell MJ. Comparison of the work of a nurse practitioner with that of a general practitioner. *Journal of the Royal College of General Practitioners* 1988;38:314-6.
7. Rees M, Kinnersley P. Nurse-led management of minor illness in a GP surgery. *Nursing Times* 1996;92(6):32-3.
8. Marsh GN, Dawes ML. Establishing a minor illness nurse in a busy general practice. *BMJ* 1995;310:778-80.
9. Ross SA. The clinical nurse practitioner in ambulatory care service. *Bull. NY Acad. Med* 1973;49(5):393-405.
10. Saffer J. Reducing low-density lipoprotein cholesterol levels in an ambulatory care system. *Arch Intern Med* 1975;155:2330-5.
11. Bierman J, Muller M. The views of primary health care practitioners regarding legal limitations influencing the practice of primary health care nurses in South Africa. *Curationis* 1994;17(3):29-32.
12. Provincial Administration Western Cape. Certificate course curriculum: curative skills in primary health care. Cape Town: Provincial Administration Western Cape; 1996. p. 1-38.
13. Provincial Administration Western Cape. Report of the bi-ministerial task team on the implementation of a municipality-based district health system. Woodstock: Provincial Administration Western Cape; 2000.
14. Pope C, Ziebland S, Mays N. Analysing qualitative data. *BMJ* 2000;320:114-6.
15. Pope C, Mays N. Researching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ* 1995;311:42-5.
16. Provincial Administration Western Cape *Healthcare 2010: Equal access to quality health care,* Cape Town: Health Department, 2003.
17. Bezuidenhout C, Southey H. The club system in the day hospitals [thesis]. Stellenbosch, South Africa: Stellenbosch University; 2000.
18. Mayers P. Training trainers, challenging nurses, changing practice, improving care – a qualitative evaluation of the implementation of the PALSA project. Paper presented at ALARPM 6th and PAR 10th World Congress; 2003 Sep 21-24; University of Pretoria, South Africa.
19. Gregson BA, Cartlidge AM, Bond J. Development of a measure of professional collaboration in primary health care. *J Epidemiol Community Health* 1992;46(1):48-53.
20. Truscott A. Urban primary health care. *Nursing RSA* 1990;5(11):43-4.