

The role of doctors in provision of support for primary health care clinics in KwaZulu-Natal, South Africa

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Abstract

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Background: Most primary health care (PHC) services in South Africa are provided by registered nurses working in clinics. Workload and scope of practice of these nurses have increased in recent years, exacerbated by widespread staff shortages. However, PHC nurses often receive little support and supervision, particularly in relation to clinical practice. Doctors working at district level are usually hospital based, but in many cases they do undertake clinic visits. These visits have the potential to improve quality of care, increase continuity and provide support for PHC nurses. In this study the visits undertaken by doctors to PHC clinics are described. The interactions between visiting doctors and PHC nurses are also explored, including perceptions and experiences of the current role and activities of visiting doctors, and ways in which this role could be developed.

Methods: The study was conducted in three districts of northern KwaZulu-Natal between June and September 2007. Both quantitative and qualitative methods were used to collect data. Fifty-eight randomly selected PHC clinics were visited, and interviews were conducted with clinic managers to obtain quantitative data.

Focus group discussions (FGDs) were held with doctors and nurses in each district. The doctors' FGDs included doctors based in district hospitals who had experience of visiting clinics, and medical managers. Nurses currently working in PHC services were included in the nurses' FGDs.

Results: Fifty of the 58 clinics reported having regular visits from a doctor. On average, doctors spent three hours at the clinic. Activities during visits were mainly clinical: 49 clinics reported that doctors saw patients on chronic medication and 45 clinics reported that doctors attended to patients referred by the nurses. Twelve clinics reported that doctors spent time teaching staff during the visit. Thirty-two clinics reported that the doctor had attended all scheduled visits over the previous three months.

During focus group discussions, both doctors and nurses stated that doctors' visits were generally helpful, but both groups felt strongly that the time spent in the clinic during visits was too short, and that the doctor visiting the clinic changed too frequently. This disrupted the development of meaningful relationships between the visiting doctor and clinic staff.

The current role of the visiting doctor was mainly clinical, with up to 30 patients booked for each visit. Some concern was expressed about the care given to patients on chronic medication given the time pressures. Doctors felt that a lack of essential equipment and drugs at the clinic limited the value of the visits, and that patients frequently were referred inappropriately. Nurses expressed concern that doctors often arrived late and were unwilling to help with the heavy patient workload at the clinic.

Additional roles identified for doctors included an increased role in teaching, development of teamwork and communication, as well as an increased administrative role.

Conclusions: Doctors' visits are not being utilised to their full potential. Additional support for PHC nurses could be provided by doctors if clear roles and activities were set out for clinic visits. These should include skills training for clinic nurses, development of clear referral criteria, and improved communication and feedback. Doctors should spend more time at the clinic during visits and work at the same clinic for a longer period. Expanding the doctors' role would improve teamwork within districts, leading to improvements in the work environment and quality of care. However, this requires commitment of district hospital managers to support doctors in their role and ensure that clinic visits are given priority.

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Introduction

Health sector reform in South Africa is based on the provision of primary health care (PHC) through the district health system (DHS), and aims to improve quality of health services, access to care, and to reduce inequity.¹ The success of transformation is dependent on the provision of adequate

numbers of skilled personnel.² The majority of PHC services are provided by registered nurses working in PHC clinics, so provision of quality health care at district level is largely dependent on the commitment and skills of these practitioners. However, they often have insufficient skills in clinical assessment and treatment, and receive little supervision and support, particularly in relation to clinical care.^{2,3} The work environment

for PHC nurses has changed in recent years, with a broadening of their scope of practice, and increasing demand for health care.⁴ The resulting increased workload has been exacerbated by shortages of skilled staff at primary health care level.⁵

Shortage of nurses is a multifaceted problem, but improvements in the work environment are an important aspect that must be addressed, if nurses are to be retained in PHC services. Important non-financial incentives shown to be important in retaining health workers in underserved areas include support, teamwork and feedback from supervisors.⁶ Training and recognition have also been identified by health workers as determining factors when deciding whether to stay in a rural area.⁷ Although there is little research to evaluate strategies to improve motivation, the introduction of supportive supervision has been shown to improve motivation and job satisfaction.⁸

Doctors working at district level are largely hospital based, but in many areas doctors from district hospitals visit PHC clinics regularly. Although the role of the visiting doctor may be an important one, it is not clearly defined.⁹ Given the drastic shortage of doctors,¹⁰ it is essential that time spent visiting clinics is structured to achieve maximum benefits for both patients and clinic staff, in order to achieve sustainable improvements in quality of care.

In line with the DHS principles of comprehensiveness, integration and accessibility,⁴ doctors should have a broad responsibility in development of quality health care throughout the district, including ensuring that referral systems work effectively. Doctors visiting PHC clinics could provide support and ongoing in-service education for primary health care nurses, as well as improving teamwork and communication between clinics and the district hospital. Continuity of care would be improved by locally developed protocols for clinical management and referral, supported by the doctors. In this way, doctors visiting clinics could improve both quality of care, and the work environment of PHC nurses.⁸

In this study, we describe how doctors interact with PHC nurses at the clinics from the perspectives of both nurses and doctors, including perceptions and experiences of the current role and activities of visiting doctors, and ways in which this role could be developed.

Methods

This study was conducted in three predominantly rural districts of northern KwaZulu-Natal, and formed part of a larger study undertaken to evaluate referral and support systems between PHC clinics and district hospitals. Both quantitative and qualitative methods were used to collect data.

Quantitative

Fifty-eight primary health care clinics were randomly selected from a list of all fixed clinics providing PHC services in Umkhanyakude, Uthungulu and Zululand districts. Mobile clinics and community health centres were excluded. Clinics were visited and interviews conducted with the clinic manager using a structured interview guide, which was developed and piloted prior to starting data collection.

Qualitative

One focus group discussion (FGD) was planned with doctors and one with clinic nurses in each of the three districts. In each district registered nurses currently working in a primary health care clinic were purposely selected by PHC supervisors to participate in the study. Medical managers from all district hospitals were asked to participate, and

also to select a doctor from their hospital who undertakes clinic visits. Doctors without experience of clinic visits were excluded. Participants were informed in writing about the research and invited to attend; they were compensated for their transport costs and received refreshments. Written consent was obtained, and anyone not wishing to participate was free to refuse. Participants were assured that individual comments would remain confidential.

The discussions were conducted in English and audio-taped.

Data analysis

Pre-coded data were double entered, cleaned and validated using Epi-info (version 6.04). SPSS version 13 (SPSS Inc, Chicago, Illinois, USA) was used for analysis of quantitative data.

All audio tapes from the focus FGDs were transcribed verbatim. The transcripts, together with observation notes, were analysed independently by two researchers. Major and minor themes were identified through manual content analysis of the transcripts, and conflicting interpretations were discussed in order to reach a consensus position.

Results

Quantitative results

Fifty-eight clinics were visited during July and August 2007. Of these, 50 reported that they had regular visits by doctors (Table I). On average, doctors spent three hours (range 1–6 hours) at the clinic during their visit. All clinics reported that the doctors' visits were either helpful (22/50) or very helpful (28/50).

Table I: Frequency of doctors' visits reported by PHC nurses

Frequency of visit	Number of clinics (%)
Twice weekly	2 (3)
Weekly	17 (29)
Every two weeks	20 (35)
Monthly	11 (19)
Not visited	8 (14)

Thirty-two of the 50 clinics (64%) reported that the doctor had not missed a visit for the previous three months. The most common reasons for doctors missing visits were lack of transport and other hospital commitments, reported by 14 and 15 clinics respectively.

Activities of doctors during these visits are presented in Table II. Twenty-three of the 50 clinics reported that clinical advice was often given to nurses during doctors' visits, 25 reported that doctors sometimes gave clinical advice, and two reported that clinical advice was never given. However, 95% of clinics reported that doctors were available to give advice on the telephone.

Table II: Activities conducted during doctors' visits reported by PHC nurses

Activity	Number of clinics (n = 50) (%)
Review chronic medication	49 (98)
Attend to referred patients	45 (90)
Conduct daily clinic consults	7 (14)
Staff training	12 (24)
Initiate ARVs	4 (8)
Grant renewals	2 (4)
Death certificates	1 (2)

Qualitative results

Four FGDs were held with doctors and three with clinic nurses between June and September 2007. A second doctors' FGD was held in one district due to poor attendance at the first one. A total of 22 doctors and 25 PHC nurses participated in the FGDs.

Experiences of visiting clinics

During FGDs, most doctors expressed that clinic visits were beneficial to them as a personal experience and in reducing workload in the hospital. Others felt clinic visits benefited patients as well, since patients did not have to travel to hospital. Most nurses expressed that doctors' visits were helpful.

One advantage that I've derived from going out to the clinic, instead of clients coming to us, is the reduction of waiting times in our out-patient department. So I think we play such a big role there; it makes follow up quicker; patients are more compliant with follow up, because most clinics are nearby their homes. So they don't spend time and money travelling to hospital. (Doctor)

They (doctors) see the patient and if there is a need of further transferring the patient to another hospital, they even make the bookings. (Nurse)

Some doctors expressed frustration because necessary equipment or drugs were not always available at clinics, leading to avoidable hospital referrals.

So if maybe we can have more things available in the clinics, because you find that they don't really need to go to the hospital, it's just the medication. Sometimes the tools that you need, just to examine maybe eyes and ears – you can't, they don't have the equipment. And you end up saying 'go to hospital', and I mean, that defeats the whole purpose of going to the clinic. (Doctor)

Another source of frustration expressed by doctors was that nurses frequently refer patients inappropriately, as perceived by doctors. Some doctors did understand that these 'inappropriate referrals' were sometimes a result of pressures experienced by nurses due to staff shortages or time pressure, or because patients ask to see the doctor.

There is still a problem of shortage of staff in our clinics. That actually also has an impact on the quality of the work that they do at the clinic, and it also influences the patients that they refer. (Doctor)

If I were to see someone with flu, really it wouldn't be proper use of my skill. (Doctor)

Time spent at the clinic

Lack of time was frequently expressed as a problem during clinic visits, both by doctors and nurses, usually because the doctor had other commitments.

You don't do your work the way you wanted to do it because you must rush for time. (Doctor)

Most nurses said the time spent by the doctor depends on the number of referred patients. Some nurses said doctors were under pressure because they were visiting more than one clinic a day, or they had to leave early because the transport was leaving. Nurses expressed some dissatisfaction, saying that the doctor usually leaves after seeing the booked patients, sometimes seeing the patients very quickly and

leaving without assisting the nurses with their work, even if the clinic is busy and short-staffed. It was suggested that the number of patients allocated to the doctor should be based on the clinic statistics, and that doctors should do more than just see booked patients. Some nurses also reported that the doctors arrived late at the clinics and patients were unable to wait.

You find that he (the doctor) tells you he wants to see the patient. When you bring the patient, he says, 'I'm running now, I'm running short of time now, I'm supposed to be at the next clinic.' (Nurse)

The doctor arrives when it's time for the patients' transport, so patients miss the doctor. The patient came to see the doctor; the doctor did not arrive in time; the patient has to leave because he will not have another transport. (Nurse)

I would like doctors to look at the clinic statistics, see the patient load, and then decide how many patients they'll see at the clinic. It is discouraging – they only see those patients booked for them. Even if there is a critically ill patient, they just call an ambulance to take the patient to hospital. (Nurse)

There was consensus between doctors and nurses that doctors should spend more time at the clinic, either by visiting more frequently, or by staying at the clinic for longer.

Since they have allocated him to visit the clinic on that day, they need to make it possible for the doctor to arrive in time. If the clinic opens at 07:00, at least he should arrive at the clinic at maybe 08:00. (Nurse)

Continuity of relationship – if you are spending a whole day you get an idea of what is happening and the better ways how to handle situations at that particular clinic. (Doctor)

However, some medical managers did express that it was not always easy to prioritise between hospital and clinic commitments and that there needed to be a balance.

One also has to take into account how the hospital itself is run. Because I think, you know, there are slight differences in priorities, perhaps cultural or historical or whatever. Medical staff are not employed just at clinics. They are employed at hospital, and they provide the clinic service. (Medical manager)

Rotation of visiting doctors

The individual doctor visiting a clinic frequently changes as doctors 'rotate' to undertake different tasks. Doctors expressed that this can lead to a lack of continuity, and disrupt the relationship between the visiting doctor and clinic staff. The frequency of rotation varied, but most doctors said that they rotated weekly or monthly. However, doctors in one sub-district reported four-monthly rotations, and annual rotations were reported in another. Most doctors believed that continuity was necessary to build and maintain good relations with clinic staff, but that this was often difficult to achieve. Some doctors reported that nurses could contact them with problems at any time.

(The rotation is) for a year, for a year (in the same clinic). I find the doctors like to know the clinic, the clinic sisters like to know the doctor; I think it also produces a support system for the clinic. Whether that doctor is on call or not, they get a call from that sister. The doctor does not mind that because there is a relational link. (Medical manager)

Activities during clinic visits

Most doctors said that visits were unstructured. However, doctors in one sub-district reported that guidelines for clinic visits were being developed.

At present it (the doctor's visit) is unstructured, largely unstructured; we try and advise the clinics about the number of patients to be kept aside for the doctor, and the number of disability grants, but beyond that there is very little structure. (Doctor)

Clinical role

Most doctors said that the visiting doctor has a primarily clinical role: attending to patients taking chronic medication and those referred by the nurses. It was reported that clinic nurses had to book up to 30 patients to see the doctor during the visit.

I think it (my role) is mostly chronic patients, just reviewing chronic prescriptions, especially those with hypertension, diabetes and epilepsy and so forth. (Medical manager)

Procedures for provision of chronic medication mean that doctors have to re-write these prescriptions at intervals, and this can become the most important focus of doctors' visits. As a result some medical managers felt that chronic patients were not being managed well.

I think our standard of care when it comes to chronic diseases... it's not so good because we are not treating patients, we are treating the papers (prescriptions). We are writing the medication, that's what we do, and often they (doctors) don't take bloods. (Medical manager)

Teaching role

When asked about their role in teaching clinic nurses during visits, most doctors reported that, because of time pressures, they were unable to teach during clinic visits. Nurses also reported that doctors did not do any teaching. Some doctors expressed the view that teaching should only be done by senior doctors, because junior doctors did not have the knowledge and experience to teach more experienced clinic nurses.

The other role will be to teach nurses while visiting, and creating this environment where the nurses feel they have support, identifying gaps and trying to close those gaps, be it from the clinical point of view or from the management point of view. (Medical manager)

Some doctors reported that they only taught nurses during consultations and there was no time set aside for teaching. Others also added that the nurses themselves were often busy, and did not have time to be taught during the doctor's visit.

You are going to see that 30 patients, and the sister has to dispense, take bloods of 30 (patients) that we are going to see. There's more; there's antenatal ones, there's immunisation, and you find that only three or two nurses. Really, where do we get time? Where do we get people to teach? (Doctor)

However, in one district, doctors did report that they schedule and conduct in-service training during visits. Some medical managers in this group reported that they had tried a variety of methods to promote teaching and learning in their clinics. Some nurses also said that their doctors conduct in-service training for staff, either before or after patients are seen. The doctor may decide on the topic or ask the staff to suggest a topic.

It depends (on) the doctor who is there at that time. Sometimes it starts with giving us in-service education. Or if he or she finishes early, she used to give us (in-service training). (Nurse)

Each week ... there's a different teaching session or topic, and you just gather the nurses around, and the counsellors, and you do a brief 10 to 15 minutes' teaching; and they often have quite interesting questions, and even if you do not know much about the topic, they can challenge you. (Doctor)

We've promoted the idea of weekly training sessions. We've used various systems to encourage it. We've had where we've drawn up a timetable of specific things we would teach each clinic. We used that for a while, and we also ask people to draw up a roster for their clinics separately and independently. Another thing I've tried to do is to get the doctors to do a quarterly report on their clinic, and that would include issues like how many teachings they've done. (Medical manager)

Nurses and doctors in those districts where visiting doctors do not teach also said that doctors should take time to teach, especially if there were interesting cases. Overall there was consensus that visiting doctors should have a teaching role.

We need to improve a lot on the training aspect of it; it's quite important. (Doctor)

Their visits do not help us; of course they do help people. Why don't they give us in-service training for about 30 minutes? (Nurse)

Dissemination of information and feedback

Another role suggested by some doctors was that of distributing protocols, dissemination of information, and providing feedback from the hospital to clinics. This was supported by the nurses, who also suggested that doctors take time to give feedback about referrals that had been sent to the hospital from the clinic.

I think (another role is) providing communication about what's going on in the hospital, what current things are... and just communication and feedback, whether it's about patients they referred. (Doctor)

Suppose when we refer patients to them at the hospital, there are things they note about patients we refer. Perhaps he (the doctor) needs to write down some of the things. And then, when he comes to the clinic, he does team briefing to help us improve or correct mistakes he might have identified with our referrals. (Nurse)

Advocacy and administrative role

Many doctors saw their role as providing support by helping to address problems found at the clinic. They described experiences of visiting clinics without essential equipment or a working telephone. Other suggested roles included checking equipment or availability of protocols and drugs, and other administrative roles. Doctors expressed the need to work more closely with PHC supervisors to support them with administrative issues at the clinic. Few doctors reported having formal meetings with supervisors, but many had ad hoc meetings as needed. Most doctors said they want more formalised interaction with supervisors and clinic management.

Just to encourage the doctor to be a bit of an advocate ... for the clinic as far as PHC supervisor, for what we think are clinically significant issues, like not having a BP machine or something at the clinic. (Medical manager)

I always drop into the (supervisors') offices before I go to visits. I go there first to see if there are any envelopes. (Doctor)

I think, to the actual running of the clinic, we are still very much outsiders. (Doctor)

Discussion

The research presents a picture of doctors visiting clinics who are interested in providing broader support to clinic nurses, but are required to see up to 30 patients in a three-hour visit, and sometimes to visit more than one clinic a day. Doctors visiting clinics rotate frequently, making development of relationships difficult, and hospital work often takes precedence over clinic visits. The role of visiting doctors remains ill defined: doctors perceive their role as undertaking work that is beyond the scope of clinic nurses, whereas clinic nurses feel that doctors should be willing to assist them with their workload.

Using visiting doctors to provide a purely clinical service, particularly to review chronic medication, without providing skills development or clinical support for nurse practitioners, is wasteful of this scarce resource and will not lead to sustainable improvements in patient care. Concerns were expressed about poor quality of care for chronic patients. This is not unexpected given the large number of these patients seen at each visit, and suggests that even clinical outcomes of doctors' visits are less than optimal. There is a perception among doctors that clinic visits are not a worthwhile use of their time, particularly in the context of inadequate equipment, inappropriate referrals and heavy hospital workloads. Despite these limitations there was consensus that the role of the doctor should be expanded, that there should be more continuity of visiting doctors, and that doctors should spend more time at clinics.

In order to maximise the benefits of doctors' visits, roles should be clearly defined and activities set out for clinic visits. These activities should include training and support for clinic nurses, development of clear referral criteria, and improved communication and feedback. This will lead to sustainable benefits for patient care and improve the perceptions both doctors and nurses have of the benefits of clinic visits. The doctor should be part of the clinic team, but there will only be meaningful teamwork, support and sharing of knowledge if there is enough time for relationships to develop.

Conclusion

The findings suggest that the doctor's role in supporting provision of clinical care at PHC level is underutilised. Expanding this role will improve teamwork, so that district hospital doctors and clinic-based nurse practitioners work together, as part of an overall continuum of care, to provide quality health care in the district. However, this requires commitment of hospital and medical managers to support doctors in developing their role, and to ensure that clinic visits are given priority.

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Conflicts of interest: None

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